MASS MEDIA AND HEALTH PRACTICES PROJECT
THE HONDURAS PROGRAM

TECHNOLOGY TRANSFER SERIES

AID EVALUATION WORKING PAPER NO. 107

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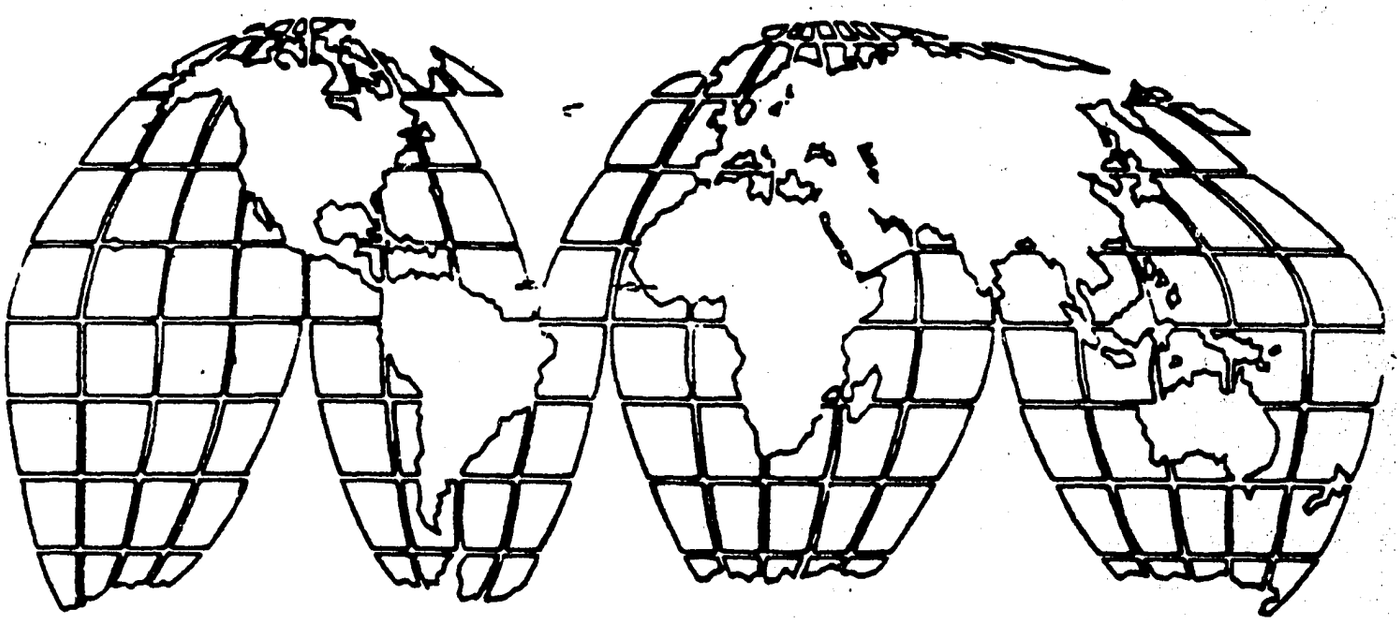

CENTER FOR DEVELOPMENT INFORMATION AND EVALUATION
BUREAU FOR PROGRAM AND POLICY COORDINATION

U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
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D R A F T

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TECHNOLOGY TRANSFER SERIES

A.I.D. EVALUATION WORKING PAPER NO. 107

by

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FOREWORD

The Center for Development Information and Evaluation is responsible for AID's project impact and program policy evaluations. This report is one of half a dozen in a series of special studies on the AID experience with the marketing aspects of technology transfer. It differs from many previous studies by CDIE which have focused on evaluating the impact of projects on intended beneficiaries. For the technology transfer series, the development interventions selected for field study were known to have had significant impact, i.e. changes in client/consumer decision-making and practices were widespread. Therefore, this report assesses the process and consequences of technology transfers.

In conducting the three to four week field studies, the teams were charged to consider both anticipated and unanticipated, and intended and unintended consequences of technological interventions. They were directed to examine AID's role as an intermediary in the process, for example, "championing" the technology of social marketing. Questions addressed by the series included: Has the technology transfer led to local mastery, widespread diffusion, and sustained technological growth? Were there significant private sector, institutional, or policy issues and how were they handled?

The second phase of the series has studied the technologies

for distribution of health and family planning products, specifically through social marketing interventions in Egypt and Honduras. The focus in the Egypt study was on Family of the Future and contraceptive social marketing. It is briefly contrasted with Oral Rehydration Therapy (ORT) promotion under the National Control of Diarrheal Diseases Project. The focus in Honduras was on PROCOMSI programs initiated under the Mass Media and Health Practices Project and continued under the Health Sector I project. While ORT promotion and distribution was the primary concern of the Honduran study, the ASHONPLAFA experience with contraceptive social marketing was also reviewed.

This report covers a series of related development interventions which are continuing with AID funding, in contrast to the more typical CDIE impact evaluation of a completed project. Thus, the report reflects the findings and conclusions at the time of the evaluation in 1985. A synthesis of the findings from all the studies under the series and from related studies will examine cross-cutting issues. CDIE's Evaluation Special Study No. 40 examines "AID's Experience with Contraceptive Social Marketing" in a dozen CSM programs through a synthesis of project evaluation findings. It draws comparisons between programs relevant to the Egypt Family of the Future study under the Technology Transfer Series. Similarly, CDIE's draft report, "Evaluation of the Factors of

Sustainability in The Gambia Mass Media and Health Practices Project," represents a field study of the program which was a companion to the Honduras program with social marketing of ORT.

The aim of these studies is to provide AID staff and others with insights into the process and consequences of AID funded technology transfer efforts, and to enable lessons to be drawn. The development interventions which have been studied are all related by the aspect of marketing. The studies in the first phase of the technology transfer series examined AID's experience with food marketing and processing technologies in both public and private sector contexts. The concepts of willing exchange, consumer/client preferences, access and information are relevant, even in the context of government/donor sponsored delivery systems. Understanding AID's experience with developing, adapting, and transferring technologies to promote widespread adoption and diffusion of health and family planning products is as important as the scientific research and development which produced oral rehydration therapy and contraceptive technologies. It is hoped that this report will serve as a building block for developing that understanding and applying it to projects, programs and policies.

Peter Delp, Technology Transfer Series
Topic Coordinator,
Center for Development Information and Evaluation,
Agency for International Development,
November, 1986

ACKOWLEDGMENTS

The team would like to thank the many people within the Honduran and U.S. governments and in private organizations who provided the time and assistance that made this study not only possible but intellectually stimulating. We are particularly grateful to Anita Seigel, USAID/Tegucigalpa, who worked with the team daily and provided important background on the project and Honduran institutions. We would also like to specifically acknowledge the assistance of Lic. Maria Rosa Bonanno of the Honduran Ministry of Health, who developed the program of team interviews conducted in Tegucigalpa, and Dr. Luis Roberto Escudo, also of the Ministry of Health, who coordinated the program of visits to rural health regions and accompanied the team to provide background on the extension of the national program in these areas and to assist in interviewing.

Preparation of the report in Washington entailed the services of several typists, and the team wishes in particular to acknowledge the assistance of Pat Brown of the Center for Development Information and Evaluation.

SUMMARY

This report examines the technology transfer process that occurred in Honduras through the Mass Media and Health Practices (MMHP) project. MMHP, centrally funded by the Agency for International Development (A.I.D.), was designed to test the use of mass media and other communication approaches to modify community health practices in developing countries. The specific interventions examined are the mass media and related social marketing activities that were developed in two phases as the Proyecto de Communicacion Massiva Aplicada a la Salud Infantil (PROCOMSI).

The first phase, PROCOMSI I, was a small 3-year pilot project on the treatment and prevention of infant diarrhea using oral rehydration therapy, including rehydration salts distributed by the Ministry of Health (Litrosol). The first phase began in 1979 under an agreement with the Honduran Ministry of Health. Technical assistance was provided by the Academy for Educational Development (AED) for project implementation and by Stanford University for various evaluation activities.

The projects second stage, PROCOMSI II, began in 1982. In this stage USAID/Tegucigalpa provided support to AED for continual technical assistance. Additional funding from Health Sector I was provided through the Ministry for extending the project's time frame, expanded the geographic coverage to three additional health regions, and included three new health interventions: immunizations, tuberculosis treatment and prevention, and malaria control. The Honduran mass media projects were selected for study because they presented an opportunity to examine the use of a new technology, social marketing, in a small pilot program and its later transfer to other regions and other health problems.

The four-person study team spent 3 weeks in Honduras in late 1985. The team conducted interviews in Washington, D.C. and Honduras with personnel associated with the project since it began in 1979. The team also visited several active project field sites and conducted interviews with health workers and the client population.

The two phases of the mass media activities had many similar goals and expected outcomes, but different levels of effort and inputs. PROCOMSI I was executed in a small area and focused on a single, well-recognized health problem. It was

characterized by bureaucratic autonomy within the Ministry of Health, liberal financing, dedicated expatriate advisers, flexible decision-making capability, and many short-term consultants. The result was a highly successful media project and health intervention.

PROCOMSI II, in contrast, covered a much larger geographic area and included additional health interventions, but it produced less dramatic results. Also, the project was more firmly integrated into the Ministry of Health administrative structure and had less flexibility and funding. Project goals were also expanded to include the institutionalization of the mass media approach within the Ministry and the transfer of selected aspects of the methodology and techniques to the local health regions, both of which were carried out with limited success.

Differences in the two phases of the project affected the transfer of mass media and social marketing technology both to the Ministry and its health regions and, to a lesser extent, to other health programs and sectors. Major factors contributing to the success of the pilot project, including its autonomy, flexibility, and expatriate management, have worked against the integration of PROCOMSI II activities into the regular functioning of the Ministry of Health.

Despite the fact that since 1979 the PROCOMSI initiative has been nominally a Ministry of Health program, the Ministry still lacks broad knowledge about the program and the mechanics of its operation. The policy decisions to institutionalize PROCOMSI and to incorporate the mass media approach into other health projects continue to be desired objectives, but they are not fully operational. PROCOMSI II remains a small, highly technical project characterized by technical, political, and geographic isolation; limited, albeit expanding, relations with other health programs and sectors; and, finally, de facto contractor management and foreign assistance financing.

The Ministry of Health leadership, while expressing great enthusiasm for PROCOMSI II, seems unclear about the long-term utility of mass media in its programs and has rather unrealistic expectations about the project's outcomes, given the differences in the levels of effort between earlier and current phases. Technical expertise remains confined to a few highly qualified Hondurans in the Ministry's Health Education Division, and there is a continued heavy emphasis on the roles of both AED and foreign consultants in project activities. Education and training programs to expand knowledge about the program and enlarge its technical base have been limited. At present, it is unlikely that mass media approaches would continue to be used in

Ministry of Health programs if the three or four key members of the Health Education Division staff were to leave their jobs or if USAID Mission support of the program were to cease abruptly.

Attempts to expand the project regionally under PROCOMSI II have had mixed success. The centrally-directed, radio-based media campaigns conducted under this phase of the project have been effective community health interventions, even though some parts of the supporting service delivery chain are weak. However, there have been some problems in trying to transfer the project methodology and technology to regional personnel. Regional communications coordinators quickly embraced the PROCOMSI approach, particularly the use of radio, sometimes at the cost of more traditional approaches to community health education. Nevertheless, there are insufficient human and financial resources at regional level to support the effective use of mass media in local programs. Nor has the Health Education Division been able to adequately assist or follow up on locally generated media projects. This suggests that for now, and perhaps even in the long term, regionalization of mass media technology should not be pursued.

A third general area of weakness in the technology transfer process has been the failure to develop cost-recovery mechanisms

and to use Honduran private enterprises. PROCOMSI I, as a demonstration project, benefited from a self-contained, public sector model. Given the current financial problems in the Honduran public health sector and the Ministry's belief in the broad and long-term applicability of the mass media methodology, this approach is inadequate for the future. Ministry of Health discussions concerning the commercial distribution of Litrosol, if actualized and accelerated, might be the beginning that could improve the odds for retaining the use of mass media approaches. Likewise, the use of the private sector, particularly in marketing and advertising, would broaden the project's technical/ professional base, improve cost-effectiveness, and increase the likelihood of sustaining the use of mass media in social programs.

The PROCOMSI projects provide valuable lessons in both the introduction and the transfer of new technology. PROCOMSI I demonstrates that mass media can be a powerful and efficient tool in public information programs by generating and helping to sustain a wide and complex set of behavioral changes. It also provides a blueprint for future A.I.D. media projects and will allow development planners in other settings to make informed choices in planning and implementating programs using media technology. PROCOMSI II is an example of how technology

developed in one context can be expanded and applied to other areas. Its weaknesses also point to several elements that should be included in development projects relying on the transfer and adaptation of new technology as part of the design. These include the need for long-term systemwide planning for the effect of a new technology, balancing autonomy versus integration in project design, and developing mechanisms that will make the project sustainable when foreign assistance ends.

PROJECT DATA SHEET: MASS MEDIA AND HEALTH PRACTICES

1. Country: Honduras

2. Project Title and Number:
   Mass Media and Health Practices, A.I.D. No. 931-1018

3. Life of Project: 1978-1982

4. Project Purpose:
   To develop and demonstrate cost-effective means of using different mass media elements to support adoption of desired health practices in rural areas of developing countries. Specifically in Honduras, to develop a replicable methodology in conjunction with existing health delivery systems, to teach ways of treating and preventing acute diarrhea in infants and children under 5 years of age.

5. Project Implementation:
   First 4 years (Phase I) for the development, application, and initial evaluation of the project methodology. If successful, a fifth year (Phase II) for the dissemination of project findings through publications and seminars. Focus on oral rehydration therapy and preventive behaviors

PROJECT DATA SHEET: MASS MEDIA AND HEALTH PRACTICES (cont.)

(breast-feeding, food preparation, and personal hygiene) using radio, graphics, and face-to-face support by local health workers and opinion leaders.

6. Project Funding:

   a. United States: $3,110,000, centrally funded over a 5-year period

   b. Honduras: Three full-time counterparts, office space, and half the radio broadcast costs.

7. Mode of Implementation:

   Two contractors, both with resident advisory staff in Honduras, to work in conjunction with Ministry of Health staff: the Academy for Educational Development, to design and implement the methodology during Phase I and Stanford University, Institute for Communications Research, to evaluate Phase I. Both contractors will be responsible for the dissemination of findings in Phase II.

8. Evaluation:

   Project had an independent evaluation component (Stanford University).

PROJECT DATA SHEET: MASS MEDIA AND HEALTH PRACTICES (cont.)

9. Project Outputs:

Implementation and evaluation of health education intervention involving oral rehydration therapy successfully completed, with significant changes in health practices in pilot area population (about 400,000 people).

10. Related Project:

Health Sector I (Project No. 422-0153) of the USAID Mission in Tegucigalpa in the amount of $15.391 million ($10.965 million loan and $4.426 million grant), especially four subprojects: No. 3, Immunization; No. 4, Diarrheal Control; No. 5, Tuberculosis; and No. 13, Mass Media for Village Health Workers.

11. Host Country Exchange Rate:

a. Name of currency: Lempira

b. At time of project authorization:

c. At time of evaluation:

PROJECT DATA SHEET: HEALTH SECTOR I

1. Country: Honduras

2. Project Title and Number: Health Sector I, A.I.D. No. 522-0153

3. Life of Project: 1980-1987

4. Project Purpose:

To increase the effectiveness, efficiency, coverage, and use of the health care system.

5. Project Implementation:

The target group for this project, is the estimated 2.9 million people who are poor and have no access to even basic medical attention and an additional 650,000 people who must depend on the public health system.

The project (as amended) has the following 20 components:

PROJECT DATA SHEET: HEALTH SECTOR I (cont.)

1. Malaria
2. Rabies
3. Immunizations
4. Diarrheal disease control
5. Tuberculosis
6. Sexually transmitted diseases
7. Family planning
8. Epidemiology training
9. Basic medicine list
10. Logistics
11. Maintenance system
12. Reinforcement of management and planning
13. Mass media for village health workers
14. Teacher training
15. Extension of supervision
16. Continuing education for village health workers
17. Continuing education
18. Acute respiratory infections
19. Operations research
20. Nutrition

PROJECT DATA SHEET: HEALTH SECTOR I (cont.)

The objectives of component 13, Mass media for village health workers, is to create in each of the seven health regions and at the national level a team of people capable of designing, producing, and implementing education campaigns that will effect changes in the knowledge, attitudes, and behavior of the target population in support of priority programs of the Ministry of Health. Four campaigns per year from 1983 to 1987 will focus on four priority programs (malaria, immunizations, diarrhea, and tuberculosis) and will apply the communications methodology of the MMHP project beyond oral rehydration therapy.

6. Project Funding:

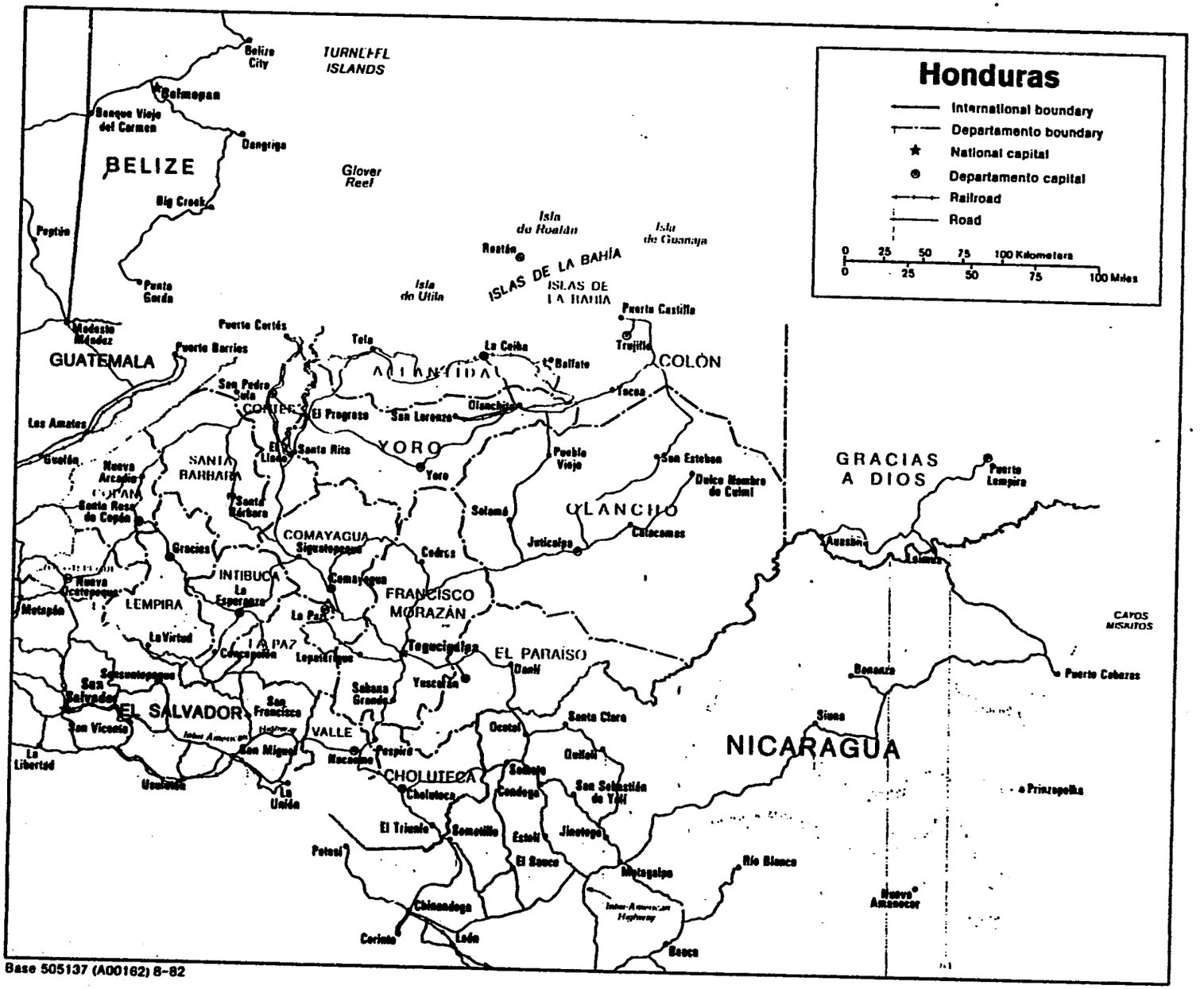
   a. United States: $26,706,000

   b. Honduras: $13,727,000

GLOSSARY

ACT	-	Applied Communications Technology, Inc.
AED	-	Academy for Educational Development
A.I.D.	-	Agency for International Development
ASHONPLAFA	-	private family association in Honduras
MMHP	-	Mass Media and Health Practices project
PAHO	-	Pan-American Health Organization
PAN	-	Pharmaceutical Production Organization, Ministry of Health
PANI	-	National Pharmaceutical Laboratory
PROCOMSI I	-	Proyecto de Communicacion Massiva Aplicada a la Salud Infantil, Phase I
PROCOMSI II	-	Proyecto de Communicacion Massiva Aplicada a la Salud Infantil, Phase II
UNICEF	-	United Nations Children's Fund
UPME	-	Education Materials Production Unit

MAP



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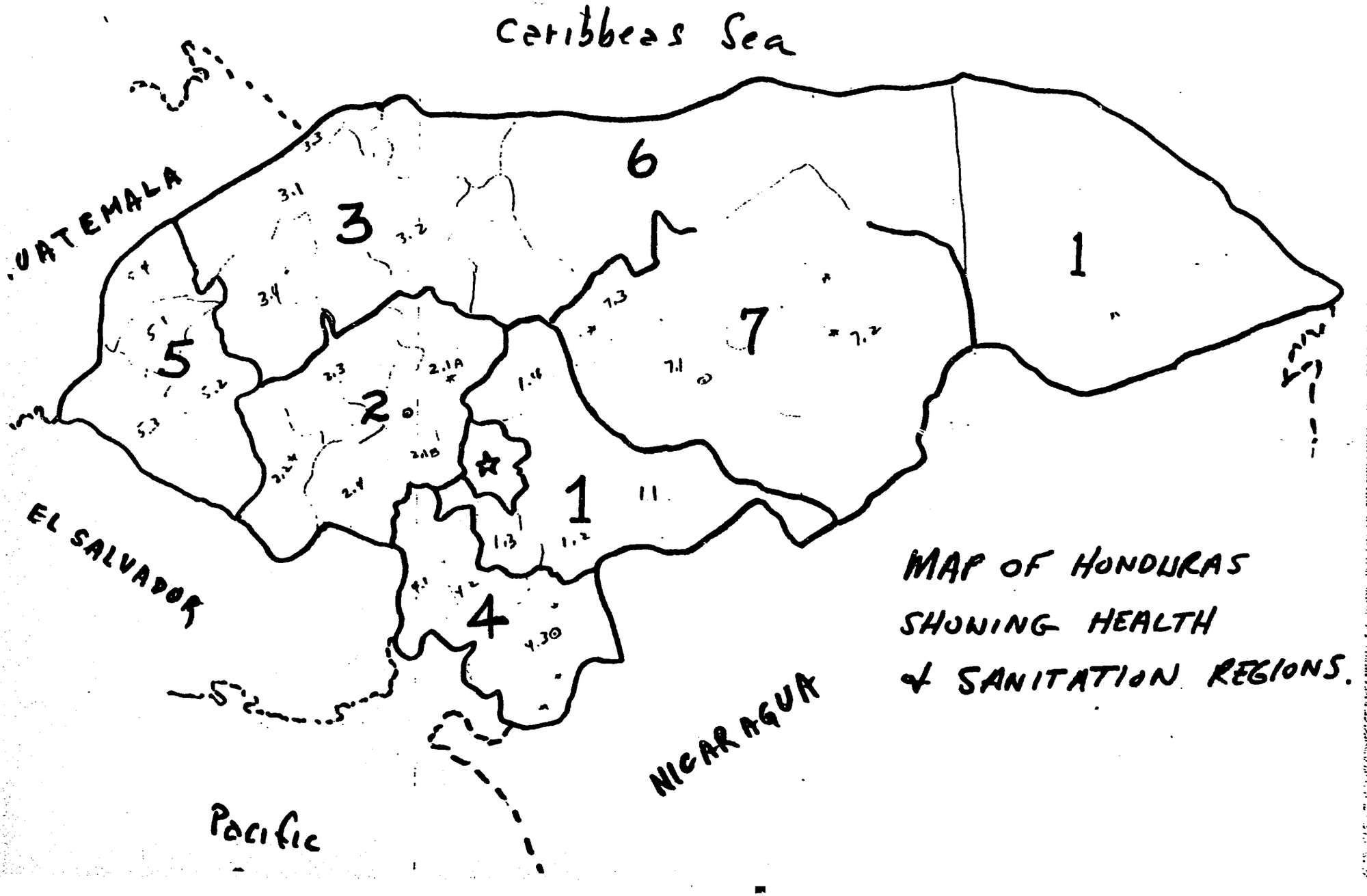

MAP OF HONDURAS SHOWING HEALTH & SANITATION REGIONS.

1. INTRODUCTION AND SETTING

1.1 Prpject Description

Over the past several years, the Agency for International Development (A.I.D.) has structured its approach in developing countries to emphasize four general areas: policy dialogue, institutional development, private sector involvement, and technology transfer. A.I.D.'s Center for Development Information and Evaluation of the Bureau for Program and Policy Coordination commissioned a series of studies on A.I.D.'s experience with technology transfer and marketing/distribution systems.

This report evaluates the effectiveness of technology transfer as it occurred during Mass Media and Health Practices (MMHP) activities in Honduras from 1979 through most of 1985.[1] Activities occurred in two phases, known locally as Proyecto de Communicacion Massiva Aplicada a la Salud Infantil (PROCOMSI) I and II. The first project was developed and centrally funded through the Office of Health and the Office of

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[1]The MMHP project had a parallel demonstration site in Gambia and was later expanded to "diffusion" sites. This evaluation addresses only the Honduran experience.

Education of A.I.D.'s Bureau for Science and Technology; support was continued and activities were expanded through the USAID/Tegucigalpa project, Health Sector I. More than US$1 million was expended in implementation and evaluation activities during PROCOMS I and almost US$900 thousand for implementation in PROCOMS II. The Academy for Educational Development (AED) and Stanford University were A.I.D.'s primary contractors for implementation and evaluation activities, respectively.

The project goals, as broadened over time, are as follows:

1. Develop a general methodology for host country use of mass media to help rural of developing countries populations learn new health practices

2. Promote more effective local means of using mass media to generate changes in health practices in rural areas

Honduras was chosen as one of the sites for a project to adapt and transfer mass media technologies to help the rural population of developing countries learn about and adopt new health practices. The mass media activities began as a pilot project in a rural area. Activities were focused for several years on the problems of diarrhea and dehydration in infants and young children. The pilot project sought to convince family

members of stricken children and local health workers to use orally administered rehydration salts. During the second stage, the oral rehydration therapy campaign was extended nationally, and other campaigns were mounted for immunizations, tuberculosis treatment and prevention, and malaria control.

The program was chosen for this special study because it presented a unique opportunity to examine the transfer and institutionalization of an adapted social marketing technology. The technology produced dramatic results in a pilot diarrheal control program in a small geographic area and was later expanded to other health regions and health activities. The specific interventions examined are the mass media activities for diarrheal disease control projects in Honduras, followed at a later stage by national mass media campaigns in immunization, tuberculosis treatment and prevention, and malaria control.

The four-person study team spent 3 weeks in Honduras in late 1985. The team conducted interviews in Washington, D.C. and Honduras with personnel who had been associated with the project since it began in 1979. The team also visited several active project field sites and interviewed both health workers and the client population. (Appendix A describes the members of the team, the evaluation schedule, and list of contacts).

1.2 Country Description

Honduras is a small (112,088 square kilometers) country in the Central American isthmus. The terrain is varied, with many mountains, but there are no major geographic barriers. The climate ranges from temperate to semitropical.

The population of Honduras is approximately 4.5 million; the capital, Tegucigalpa, has about 450,000 inhabitants. Although migration to urban areas is heavy, most of the population lives in rural areas. The population is primarily (90 percent) a single mestizo (mixed Indian and European) ethnic group. This homogeneity is reinforced by a common language--Spanish. (In contrast, neighboring Guatemala has 22 dialects.)

Education is compulsory through the sixth grade, and attendance is 70 percent; however, less than 16 percent continue to junior high school. A 1984 estimate of the literacy rate was 55 percent; literacy is higher in urban areas (65 percent) and lower in rural ones (25-30 percent) (U.S. Department of State 1984).

Compared with other Central American countries, general health status is low, although the Government of Honduras is comitted to improving health care. The average life expectancy

in Honduras is 60.7 years, and the infant mortality rate is 73 per 1,000. By contrast, the infant mortality rate is 67 per 1,000 in Guatemala and it is 19 per 1,000 in Costa Rica.

Agriculture is the principal economic activity, and most Hondurans derive their income from farming. Per capita income averages about US$670 but is considerably lower in rural areas. Although there are indications that per capita income has been rising slowly, economic conditions for the government of Honduras worsened during the mass media project, and the real level of public expenditures was cut. Nevertheless, there has been a relatively stable political climate and continuity in Government policy.

Foreign assistance to Honduras has been very generous in recent years, largely because of U.S. support and the proximity of Honduras to Nicaragua.

The central government budget in 1984 was US$1.334 million, with revenues of US$805 million. Total USAID obligations to Honduras for 1984 were US$152 million, of which US$7.150 million was obligated to the health sector. The budget of the Ministry of Health was US$65.850 million in 1985.

1.3 Health Service Delivery System

The Ministry of Health is a major provider of health care services in Honduras. Its services are essentially free to patients. Private physicians provide additional services for fees in urban areas, and traditional midwives and "curers" also provide services for fees, mostly in rural areas.

Ministry of Health service delivery is organized on six levels:

-- Level 6. Central Ministry of Health offices and six national hospitals in Tegucigalpa

-- Level 5. Eight regional Ministry of Health offices and six regional hospitals

-- Level 4. Thirty-four Ministry of Health subregional health area offices and seven area hospitals

-- Level 3. Ninety-six rural health posts with a physician assigned to each

-- Level 2. Four-hundredfifty rural health posts with an auxiliary nurse assigned to each

-- Level 1. A fluctuating number of community volunteers (health guardians) in communities without Levels 2-6 services

The central level is directed by the Minister and Vice-Minister of Health, who are concerned with policy direction, and a Director General, who provides the most direct, continuous leadership to the central and regional units. The hospitals develop their own budgets and are largely autonomous except for policy guidance from above; only informal coordination occurs between regional directors and hospital directors in their areas.

The Ministry of Health is also organized according to eight health regions--the metropolitan area of Tegucigalpa and seven other geographical areas. Each health region has a director and other administrative staff responsible for overseeing the service delivery within the region.

The complexity of health services differs substantially at each level. For example, hospital services are most complete in Tegucigalpa but become increasingly limited at each lower level. The area hospitals (Level 4) are limited to general obstetrical, gynecological, surgical, pediatric, and internal medicine services. In-patient care is rare below that level. At rural health posts (Level 2), only auxiliary nurses

are available to provide clinical services. They are responsible for home visits and the supervision of the community volunteers, health promoters, and vector control workers in their areas; they are also expected to maintain close ties with traditional midwives. In addition, auxilliary nurses keep records and prepare reports associated with these activities.

At Level 1, community health workers, known as health guardians, treat simple diarrhea, colds, and parasites and provide first aid. The guardian is authorized to dispense aspirin, antidiaretics, antispasmodics, expectorants, antiparasitics, and alcohol and antibiotic ointments for treating wounds. Guardians are also trained to give well-baby advice, to provide health and nutrition education, and to promote such preventive measures as boiling water for drinking. They receive no salary or monetary reimbursement.

Fortunately the Ministry of Health is staffed by many conscientious, hard-working individuals. However such problems as low budgets, uneven logistical support, and incomplete staffing are common and difficult to solve. At the time that the oral rehydration therapy program was introduced, conditions were such that temporary absences of health care providers for training, leave, illness, or assignment to high-priority efforts such as national campaigns often meant that routine responsibilities went unmet. Also, there were no procedures or

funds to reimburse workers at the lowest levels of the health system for out-of-pocket expenses, such as travel to obtain medical supplies. Because many volunteers lived a half day's walk or more from a health post, they were often without authorized and needed supplies.

1.4 History of Oral Rehydration Therapy in Honduras

Dehydration is a serious, sometimes fatal, consequence of diarrhea. In late 1977, it was estimated that 24 percent of infant mortality in Honduras was due to diarrheal dehydration. In the mid-1970s, the principal treatment of diarrheal dehydration in Honduras was still intravenous therapy, a hospital-based procedure that was both resource-expensive and largely unavailable to the country's rural population. A new, simple therapy using an orally administered rehydration solution of salts dissolved in water was pioneered and tested in Bangladesh and was found to be effective when administered promptly and in correct proportions and volume. Information on this therapy was spread through the international health community, but as with most new information and procedures, acceptance and adoption were not instantaneous.

The awareness of dehydration as a major problem and the commitment to low-cost rehydration therapy grew in Honduras during the late 1970s and early 1980s both within the Ministry of Health and in the physician community. In the 1970s, the Ministry of Health approved several research studies and pilot projects on the applicability of oral rehydration therapy and the relative effectiveness of various formulas, methods, and sites for administering the salts and on the types of health personnel who could effectively dispense rehydration salts and educate mothers about the therapy and its administration.

Multilateral donors, including A.I.D., assisted the Honduran Government with these activities. The Pan-American Health Organization (PAHO) provided substantial assistance on breast-feeding and infant diarrhea to the Ministry of Health through jointly sponsored regional conferences and research focused on oral rehydration therapy and the testing of various formulations of oral rehydration salts. PAHO provided technical assistance and training and was also instrumental in establishing the Educational Materials Production Unit, an audiovisual production center within the Ministry of Health for which it provided operational support for several years.

The United Nations Children's Fund (UNICEF) also played an important early role in championing oral rehydration therapy and providing the Ministry of Health with packets of oral rehydration salts. UNICEF conducted studies of market size and

distribution and provided technical assistance to the Ministry for establishing a local capability for manufacturing (mixing) and packaging oral rehydration salts through the National Pharmaceutical Laboratory (PANI). Development of the Honduran oral rehydration salt preparation, Litrosol, evolved from this assistance.

Deaths from infant diarrheal and the need to expand use of oral rehydration therapy were becoming a concern for USAID/Tegucigalpa in the late 1970s and early 1980s and were increasingly included in discussions about future bilateral health agreements. A.I.D.'s direct financial support for oral rehydration therapy began with the centrally funded MMHP project; A.I.D. also imported rehydration salts for the Government of Honduras, which allowed UNICEF to phase down its supply activities. A.I.D. continued and expanded its assistance through the A.I.D./Government of Honduras agreement, known as the Health Sector I project, in which oral rehydration therapy was a significant feature.

The Honduran Ministry of Health made several innovative decisions in taking international assistance. On the policy level it developed the Program for Control of Diarrheal Diseases and the National Plan for 1982-1985. The plan outlined a three-pronged oral rehydration therapy strategy, including the local production of oral rehydration therapy packets through

PANI (Corrales 1983). The Ministry of Health changed the health organizational structure to support the oral rehydration therapy program, first by establishing and staffing the Diarrheal Control Unit within its Epidemiology Division and later by creating the Health Education Unit, which consolidated Ministry of Health resources into a viable operational unit. The Ministry of Health also became the main supplier of oral rehydration salts, and the distributor and service provider through its health services network.

2. THE TECHNOLOGICAL INTERVENTIONS

2.1 The Mass Media and Health Practices Project

The Mass Media and Health Practices (MMHP) project is part of a long-term effort by A.I.D. to better understand how modern communication technology can contribute to improved and expanded health services. MMHP, a centrally funded activity of the Bureau for Science and Technology's Office of Education and Office of Health, was a 5-year project initiated in 1978 to develop and test more effective means of using communications methods and combinations of mass media elements to support desired changes in community health practices, especially in rural areas.

This methodology was influenced primarily by two approaches, which have appeared increasingly in development projects over the last 10 years. The first is a communications strategy drawn from relatively new approaches to public education. It attempts, in a predefined period of time, to change a particular set of behaviors in a large target audience. It is an extension of the media campaign approach that has been used for over 2 decades to change the behavior of target audiences (e.g., smoking, traffic safety). However, it also integraces media use into a multifaceted communications strategy that continues over a period of time and includes multiple channels (e.g., graphics, radio, and face-to-face communication). In emphasizing long-range planning, this approach minimizes the use of "crisis" campaigns and promotes systematic application of a broader approach to priority areas.

The second innovation used by MMHP is a social marketing strategy to promote the adoption and continued use of health interventions and/or products. Broadly defined, social marketing is "... the use of marketing tools (marketing research, product development, pricing, distribution, advertising, and promotion) to encourage societally beneficial behavior by appealing to people's self-interest (Fox 1984)." This approach tries to change consumer behavior regarding a socially desirable product by meeting consumer needs and

interests rather than by force or social pressure. In short, the approach is oriented to consumer interests and appeals directly to consumer cost-benefit analysis.

The MMHP strategy integrates concepts from these two areas with more traditional approaches to community health education, training, and product distribution. The resulting methodology was designed as a "blueprint" that could be used to implement communications projects in many developing country settings. Salient features of the project's methodology include the following:

-- Intensive use of research for planning
-- Adoption of a social marketing perspective
-- Intensive use of pretesting and formative evaluation in message and project design
-- Use of an integrated campaign format based on multiple communications channels
-- Use of behavioral analysis in project design and implementation
-- Concentration on a focused set of objectives

The MMHP provided field demonstrations via pilot projects in two countries and an extensive evaluation component to monitor project progress and impact. Oral rehydration therapy was the health intervention selected to test the MMHP approach.

In 1978 A.I.D. awarded 5-year contracts to the Academy for Educational Development (AED) and Stanford University for work in Honduras and Gambia. AED and Stanford were to carry out oral rehydration therapy communications programs and evaluation, respectively, in each country. Both programs received similar assistance in materials production, developmental research, and long-term technical assistance, although Honduras also was funded for broadcast time and 6 person-years of technical assistance (compared with 3 for Gambia). There was a major difference, however, in the oral rehydration therapy strategy pursued.

In Gambia, the oral rehydration salts were to be made by the childrens' caretakers from ordinary household products and administered in the home. The radio campaign was directed at teaching the proper recipe, mixing procedures, and use of the home-prepared solution. In Honduras prepackaged oral rehydration salts were distributed free through existing Ministry of Health outlets. Thus, many of the project components differed. Despite differences, similar methodologies and inputs were selected to preserve the cross-cultural comparability of results. In both countries the AED project staff, assisted by national health personnel, developed a public education campaign that combined radio, specialized print material, and health-worker training to deliver information on the preparation and use of oral rehydration therapy. Both

campaigns also included other critical messages on rural water use, sanitation practices, infant feeding, food preparation practices, and personal hygiene.

Worldwide interest in oral rehydration therapy, the innovative approach and materials produced by the project, and early positive field results helped focus considerable attention on MMHP in the early 1980s and led to the expansion of the project.

2.1.1 Project Strategy for Honduras

The initial MMHP strategy in Honduras was to develop and demonstrate the use of a sophisticated mass media campaign for a recognized health problem. Specifically, the strategy was to intensify and expand--in a pilot area--the existing effort to educate rural families concerning diarrhea in infants and children and to change their behavior, especially by convincing them to adopt oral rehydration therapy.

Use of mass media was to be coordinated with existing health education practices, which were to be strengthened; individually wrapped, prepackaged oral rehydration salts were to be used; an identifiably Honduran oral rehydration salt product

was to be created; and distribution was to be free through the Ministry of Health's service delivery system, including its volunteer outreach workers. These activities were to be accompanied by considerable research (1) to identify clearly the existing awareness, attitudes, and practices of the target population regarding the health problem; (2) to identify message needs; (3) to identify the access to and use of mass media channels; (4) to evaluate and improve messages; and (5) to measure the impact of the project on awareness and behavior.

The strategy did not include a role for private sector distribution or a cost-recovery mechanism, for the latter was contrary to Ministry of Health policy and practice.

From the A.I.D. perspective, MMHP was a pilot project and a demonstration effort that would be instructive and valuable, but it was not a regular country project expected to meet traditional criteria such as sustainability. From the Honduran perspective, this was a research project and as such, it was staffed and administered outside the traditional bureacracy. Its research status also conferred on the project much greater staffing, spending, and other decision-making authority than would have been possible otherwise. This ensured A.I.D. contractors unusual autonomy in carrying out their mandate.

Later, in a second stage funded by USAID/Tegucigalpa under the Health Sector I project that had not been anticipated at the outset, the strategy was expanded (1) to extend the oral rehydration therapy campaign nationally, (2) to apply the same methodology to other health areas, and (3) to institutionalize the knowledge and skills required to effectively use the mass media approach within the Ministry of Health.

2.1.2 The Technology of the Project

The technology applied in Honduras comprised of specialized knowledge and experience and the management and technical skills to research a market, identify message requirements, develop effective messages, create acceptable product packaging, design and implement a multimedia campaign, assess the impact on the target population, evaluate the process throughout each phase, and feed back the information as needed to correct or improve the project. Some of these skills are derived from well-defined theory--population sampling and data analysis, for example--but many of them are experience-based. Especially because oral rehydration therapy for rural Hondurans were new to those implementing the project, the research, evaluation and feedback processes geared to corrective actions were important elements in the methodology.

In adapting and refining the technology for promoting oral rehydration therapy in rural Honduras, specific issues were identified that focused the effort toward manageable goals. Some of the more salient issues are listed in Table 1.

2.2 The PROCOMSI Projects

The A.I.D. project agreement signed with the Government of Honduras designated PROCOMSI I as a priority activity of the Ministry of Health with the following specific objectives:

-- Strengthening the health education capacity of Honduras through the systematic application of mass communications

-- Contributing significantly to the prevention and treatment of acute infant diarrhea in a rural demonstration area of the country

PROCOMSI II followed in order to extend oral rehydration therapy activities nationally, to apply the mass media methodology to other priority health concerns, and to create a mass media capability within the Ministry of Health.

Table 1. Design Issues for Promoting Oral Rehydration Therapy

Topic	Design Issues
The Health Problem	Were there one or more types of diarrheal episodes? Were they uniformly distributed geographically? Seasonally?
Target Audience	Are they Homogeneous or varied?
Health Behavior	Existing treatment of diarrhea, nutrition, taboos
Health System	Capacity to provide services, supplies
Radio	Broadcast system, cost, radio ownership, and usage
Print Media	Existing usage, exposure, production capacity
Rehydration Regimen	Clinic versus home use; role of intraveneous therapy, and mixing, storage, and dosage of oral rehydration salts
Treatment Strategy	Mild versus severe diarrhea; stages of dehydration, significance and appropriate responses
Treatment Objective	Home use of oral rehydration salts, prevention of severe dehydration and malnutrition
Prevention Objective	Cluster of behaviors
Campaign Structure	Multiple, intensively repeated short radio messages, broad use of print materials and health workers
Time	24-month broadcast cycle, 36 months overall

Source:

2.2.1 PROCOMSI I

PROCOMSI I involved two distinct activities: an initial 9-month preprogram research activity and the actual execution, monitoring, and revision of the public communications campaign itself. Both phases were carried out through the Ministry of Health's Health Education Division.

As the technical assistance contractor, AED provided two expatriate resident advisers, coordinated the project's external technical assistance, managed in-country expenditures, and provided training for three Honduran counterparts who were originally funded through the project but were later incorporated into the permanent staff of the Ministry's Health Education Division. Stanford University, which evaluated the project, also had a resident adviser.[2]

The area selected for the pilot program was Health Region One, a largely rural area of 400,000 inhabitants that surrounds, but does not include, Tegucigalpa. The broad strategy was to develop and implement an intensive community education campaign focused on the adoption of Litrosol, the prepackaged rehydration salt supplied by the Ministry of Health.

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[2] Responsibility for the evaluation was subsequently transferred to the Food Research Institute of Stanford University and its subcontractor, Applied Communication Technology.

The first phase of the project was directed at data gathering and analysis of factors thought to affect the cause and treatment of diarrheal disease (e.g., health beliefs and practices of the target population; environmental or seasonal variations in incidence, existence, and use of health networks). Information was also collected on candidate distribution systems for information and materials, media use and habits, and interpersonal communications networks. Following this, radio messages, training programs for health workers and print materials were developed, using both pretesting and formative evaluation.

The AED advisers and their Honduran colleagues planned an integrated program of radio, print materials, and health-worker training to teach or reinforce changes in a variety of skills and beliefs related to infant diarrhea. The primary objective was to identify and then use an optimal combination of inexpensive radio messages and more expensive interpersonal and print communication.

The media campaign was timed to coincide with peak diarrhea seasons and was preceded by intensive face-to-face training of local and professional health workers in the administration of oral rehydration therapy. Initial mass media efforts were directed at educating rural mothers and other caretakers of children in the diagnosis of diarrhea-caused dehydration and in

the administration of Litrosol. Following the peak season of acute diarrhea, the message focus shifted to prevention techniques, although treatment messages reinforcing therapy continued. During the second diarrhea peak, media were used to reinforce treatment behaviors learned in the previous year and to continue education about prevention measures.

Throughout the campaign, radio, reinforced by print materials (posters, promotional and educational materials), was the primary vehicle of community education. Formats were varied and creative, employing a variety of devices such as radio spots, live interviews, and games. Community recognition of Litrosol messages was high, and campaign "personalities" such as Dr. Salustiano, a fictional Ministry of Health physician, were widely known.

The Stanford University impact evaluation showned that community access to the communications channels used in the campaign was good (approximately 77 percent of households in the pilot area owned and used radios) (Applied Communication Technology, June 1985). The target audience was heavily exposed to the messages, resulting in rapidly increasing awareness of oral rehydration therapy and in behavioral change leading to a high rate of adoption of the promoted practice. By the end of the campaign, 62 percent of the mothers in the pilot area had

tried Litrosol, and a Stanford report concluded that there was a detectable impact on aggregate health status that could be attributed to the project.

The PROCOMSI I demonstration project is generally considered a success by Ministry of Health officials and the Honduran project staff, the contractors, and A.I.D. personnel in both Washington, D.C. and the Mission in Tegucigalpa. This helped generate follow-on activities that built on the MMHP communications strategy used in the oral rehydration therapy pilot project. Most of these were funded by USAID/Tegucigalpa and provided for AED technical assistance and media costs for several additional health initiatives beginning in 1980 (see Table 2).

The first Mission amendment to the AED contract was in 1981 and provided technical assistance for increasing the water and sanitation messages for a separate Mission-supported program in three provinces. It was funded under the Health Sector I project.

2.2.2 PROCOMSI II

PROCOMSI II began with a second Mission amendment to the AED project agreement in July 1982. This provided 24 additional

months of technical assistance, and about the same time, received Health Sector I funding through the Ministry. The goals of this extension were much more ambitious than those of PROCOMSI I, and additional funding was provided from USAID/Tegucigalpa and Ministry of Health resources in later years.

The oral rehydration campaign was to be extended nationally, and support was provided for three centrally managed national campaigns in tuberculosis prevention and treatment, malaria control, and immunization in Health Regions 2,4, and 7. (A fourth campaign in family planning has yet to be carried out). The Ministry of Health considered these to be the first phase of an eventual national expansion of the mass media approach to health programming.

Also, the MMHP communications planning approach and methodology were to be institutionalized in the Ministry of Health, and funds were provided for strengthening the existing network of primary health care workers

The national campaigns were the largest component of PROCOMSI II and were coordinated by the Health Education Division in Tegucigalpa. Working closely with local counterparts, PROCOMSI II developed, tested, and produced for each campaign a full range of mass media and training materials,

including radio spots, user information (posters, pamphlets, and the like), and training curricula. Principal implementers at the regional level also received training in project methodology (or retraining, for those who had worked with the Litrosol campaign). The campaigns were also closely coordinated with service delivery systems and in the case of immunizations, with campaigns in diarrheal disease control and breast-feeding. (Stanford University conducted the evaluation of these campaigns and end-user health benefits. Results are summarized in the 1985 Applied Communication Technology, Inc. (ACT) evaluation reports.)

The need for better coordination of national campaigns at the local level led to the appointment of eight regional coordinators. The coordinators are attached to the Health Education Division staff but work in the headquarters of the target health regions. Coordinators have two areas of responsibility: local coordination of the national campaigns and decentralization (regionalization) of the mass media initiative. As such, they head the original Regional Health Committees, which, since 1984, have assumed responsibility for local execution of regional and national campaigns. They are also expected to become familiar with mass media technology and apply it, where possible, to their own programs.

Much more work, as measured by training and campaigns, was performed under PROCOMSI II than under PROCOMSI (see Appendix D). Also, the work was carried out in less time, with less technical assistance, and with greater participation by the Ministry's Health Education Division. The campaigns consisted mostly of radio messages, with less emphasis on support materials. The methodology developed in PROCOMSI I was shortened--there was less time for research, planning, and feedback, and the campaigns themselves were less complete and not sustained as long.[3] Although not considered as successful as PROCOMSI I, the Ministry of Health and USAID/Tegucigalpa have generally been satisfied with the impacts to date of PROCOMSI II activities.

2.2.3 Project Relationships With the Private Sector

Planning for MMHP activities in Honduras did not include a role for private voluntary organizations or the commercial sector. The project was implemented entirely through the

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[3]See ACT evaluation reports (see Bibliography) on these campaigns for more complete discussion of project dates, methodology, and evaluation results.

Ministry of Health, and Litrosol and other Ministry of Health supplies were distributed free of charge through the public health system.

The absence of formal relationships between the project and private voluntary organizations working in the country generally had little effect on project outcomes because the majority of these voluntary organizations had different mandates, spheres of interest, and clients. For example, CARE is involved in village water and waste disposal, and Save the Children Federation is supporting rural water projects. The nutrition projects being supported by the World Relief Organization and Catholic Relief Services are somewhat less remote. This is not the case, however, with ASHONPLAFA, the private family planning association and its contractor- (TRITON Corporation) implemented commercial retail sales project.

ASHONPLAFA operates family planning clinics and the commercial rental sales project for condoms and oral contraceptives with A.I.D. funding and TRITON's technical assistance. This project has also initiated an advertising campaign using Honduran pharmacies throughout the country and plans to include food outlets at a later date.

At present, Litrosol is packaged through PANI, a semiautonomous pharmaceutical production facility of the

Ministry of Health that receives international support, and distributed free through the Ministry network. During the team's visit, the Government of Honduras was exploring divestiture of Litrosol packaging and distribution; the outcome will have implications for private sector marketing of Litrosol or similar products.

2.3 Current Status

By 1985, the PROCOMSI program had undergone some changes that clearly distinguished it from the original MMHP pilot project. The most significant of these are discussed below:

Ministry of Health Administration. PROCOMSI II activities under Health Sector I were integrated into the regular Ministry of Health management process. This shift from its earlier autonomous research status during MMHP has eliminated much of the decision-making flexibility and discretionary budgeting that characterized PROCOMSI I, but integration of the project into the Ministry's normal planning cycle has improved awareness perception of the project in that institution.

Organization of the Health Education Division. In 1984 the Ministry's Health Education Division was reorganized and MMHP

personnel and methodology were formally integrated into this new structure. A new director, drawn from the Ministry's regular line management, was appointed, and three project staff positions formerly supported by the MMHP project were converted to regular Ministry of Health appointments. Finally, the Health Education Division incorporated the Education Materials Production Unit, and the entire division was consolidated into facilities on the outskirts of Tegucigalpa, where broadcast recording and audiovisual production equipment were available. In 1985, the Health Education division had a full-time staff of 18, which included a director and deputy director, five Health Education Division/MMHP technicians, three Education Materials and Production Unit staff, and the eight regional coordinators.

Program Development Strategy. Consistent with the changes described above, the Health Education Division has modified parts of the approach developed during the MMHP project. Research has been de-emphasized, and there is a comparatively new focus on management and coordination with other health departments of the Ministry. Staff expansion has also enabled the Health Education Division to become a technical resource for other Ministry of Health divisions. For example, the division has begun to perform some of the functions of an advertising and marketing agency: other Ministry of Health divisions are its "clients," and the rural audience is the potential customer whose needs and attitudes must be understood to achieve the

desired behavior changes. In this new arrangement, funds are provided by another Ministry of Health division, and the Health Education Division defines campaign needs and goals.

Related to this strategy change, the current director of the Health Education Division has an office in the Ministry, rather than at the Division's headquarters, and sees his primary role as an educator-salesperson for Health Education Division services. He devotes most of his time to liaison activities with other components of the Ministry of Health and to activities to gain support for the political project.

Finally, the functions of the Health Education Division have been expanded to include training responsibilities for regional personnel. At present this is a limited obligation, but it could increase if additional donor resources become available in 1986 (as is currently anticipated).

Regionalization. The relative success of the centrally managed health campaigns has led to a policy decision by the Health Education Division to decentralize the use of mass media by encouraging regional coordinators to use this approach in their local programs. Theoretically, this implies the use of the multimedia strategy developed in the Litrosol campaign. In practice, however, it has focused on the local use of radio.

The emphasis on radio, according to the Health Education Division and the AED technical advisers, is due to the relative costs and potential impact of this medium over graphics and client educational materials in rural areas. The larger number of staff with radio skills was also a factor, as was the availability of funds through the PROCOMSI II agreement for the purchase of radio time to air local productions.

The regional coordinators support regionalization and some, using training provided by the Health Education Division, have attempted to produce their own local radio spots or tape-recorded health programs. The broader MMHP methodology was also understood, and at least one coordinator tried to use the complete campaign approach on a local health problem, including MMHP analytical tools, radio spots, graphics, and various training and interpersonal techniques.

In 1985, however, the regionalization initiative was experiencing problems. The decision to decentralize had not been widely discussed or approved by the Ministry of Health, and many officials were ignorant of or indifferent to it; health regions typically had no specific budgets for these activities and directors were reluctant to allocate scarce funds to these activities. Regional coordinators had not received sufficient followup to their initial training to carry through local

programs, and their failure rate seemed high; the Health Education Division had neither the staff nor the resources to monitor or support such a program.

2.4 Project Costs

Information on project costs was sketchy. A complete description of funding for PROCOMSI I and PROCOMSI II could not be assembled, nor could the standard conclusions, which might be drawn from cost data, be derived (e.g., costs per project year, per health intervention, or per treatment of illness episode). There are various reasons for this.

The mass media initiative in Honduras has been active since 1980 and has had multiple funding sources; A.I.D.'s authorizations for the activities are not tied to actual obligations and records of obligations, for MMHP activities are too complicated to reconstruct; summaries of contractors' expenditure reports or vouchers for payment were not available. USAID/Tegucigalpa support to the project, while carefully documented, does not include information on project expenditures by fiscal or calendar years or phases of the project; cost information from A.I.D. are aggregated over many years, and cost information from the contractor are difficult to interpret and seem to be incomplete.

The following four sources of financial information were available to the evaluation team:

-- The MMHP Project Paper, with the total approved project funding

-- The evaluation team's tally, by year, of Health Sector I obligations related to mass media health practices activities for 1980-1985

-- USAID/Tegucigalpa's table of Health Sector I expenditures for mass media and health practices activities for 1980-1985

-- ACT's cost/benefit analysis of the MMHP/PROCOMSI I project for 1980-1982 (1985)

This information is analyzed in Section 3.6 of this report.

The support for PROCOMSI I activities in Honduras began in 1978 with an A.I.D. grant of US$3.1 million for the 5-year MMHP project. The budget allocated US$1.8 million for implementation activities and US$1.3 million for evaluation activities for work in two countries. Almost 40 percent (US$1.205 million) was authorized at that time for FYs 1978 and 1979 (US$689,000 for implementation and US$516,000 for evaluation). The agreements signed with AED and Stanford University in late 1979 included

funds for country projects in Honduras and Gambia, but did not have separate budgets for each country. Consequently, no expenditure reports are available for country projects from the initial obligation. Information on whether the remaining grant funds approved in 1978 were obligated in later years likewise has been unavailable. These amounted to US$1.111 million for implementation activities and $784,000 for evaluation.

Mass media and health practices activities in Honduras also received another large infusion of funds from the 1980 USAID/Tegucigalpa and Government of Honduras agreement providing US$27.6 million in loan and grant assistance for 7 years of activities (the Health Sector I project). About 20 subprojects were approved under Health Sector I, some directly related to mass media and health practices activities, others partly related, but most only indirectly related.

USAID Mission obligations during 1980-1985 for mass media and health practices activities were tallied from Mission records and totaled US$1.118 million (see Table 2).

A recent draft evaluation report of Health Sector I contained information from the Human Resources Division of USAID/Tegucigalpa on expenditures for mass media and health practices activities during 1980-1985 from Health Sector I funds. A total of US$870,000 was spent: US$392,000 of grant funds and US$478,500 of loan funds (see Table 3).

Table 2. USAID Mission Funding Obligations for the Mass Media Health Activities, 1980-1985 (in thousands of U.S. dollars)

Year	Total	Technical Assistance	Print/ Radio	Other Purpose/ Not Classifiable
1980	$277	$83	$194	-
1981	96	-	96	-
1982	388	83	189	$82 + 34
1983	-	-	-	-
1984	102	102	-	-
1985	255	255	-	-
Total	$1,118	$ 523	$479	$ 116

Source: USAID/Tegucigalpa records, tallied by evaluation team.

Table 3. Expenditures of Mission Funds For Mass Media and Health Practices Activities, 1980-1985

Item	Amount	Source
Technical Assistance	$392,000	Grant
Radio Transmission	327,000	Loan
Materials Production	143,000	Loan
Per Diem	8,500	Loan
Total	$870,500	

Source: USAID/Tegulcigalpa, Health Sector I (draft evaluation report).

The absence of separate, detailed expenditure and budget information for the PROCOMSI I and PROCOMSI II periods was partially offset by the cost-benefit analysis of PROCOMSI I, "Cost Effectiveness of the Mass Media and Health Practices Projects" (September 1985), prepared by ACT, the private firm subcontracted by Stanford University under its A.I.D. contract.[4]

Apparently faced with the same dearth of relevant expenditure information, the authors reviewed detailed accounting records of AED for 1982 to estimate AED's outlays for that year, to which they added the Mission and Ministry of Health outlays reported to them. These figures formed the base to impute outlays for 1980 and 1981, for which data were not directly available. The report concludes that total outlays for the Honduran MMHP/PROCOMSI I pilot project for the years 1980-1982 were US$632,000 in current dollars (US$1.040 million if adjusted to 1985 dollars).

Table 4 provides data on Ministry of Health obligations (not out lays) from 1981-1985.

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[4]ACT is headed by Dr. Dennis Foote, the former principal investigator for the Stanford contract. Dr. Donald Shephard and Logan Brenzel of the Harvard University Institute for Health Research are cited in the report as contributors.

An average of approximately 8 percent of the Ministry of Health's annual budget was allocated to Environmental Sanitation and Health Promotion over the period of 1981-1985, or a total of US$25 million. This apparently includes the Ministry of Health outlays to the Health Education Division.

Evaluation costs incurred by Stanford University were omitted from this analysis, as were perhaps other outlays for the project not readily identifiable at that time. Combined mission and Ministry of Health inputs for Evaluation were included at less than US$100,000.

Table 4. Ministry of Health Obligations[a]
1981-1985
(thousands of U.S. dollars)

Year	Total[b]	Environmental Sanitation and Health Promotion[c]	Percentage of Total Annual Obligations
1981	57,579	5,400	9.4
1982	64,015	5,700	8.9
1983	69,437	5,600	8.1
1984	66,809	4,200	6.3
1985	65,850	4,100	6.2
Total	323,690	25,000	

[a]Actual expenditures are not available.
[b]Excludes external funding
[c]Assumed to include support of Health Education Division

Source: Evaluation of Health Sector I (draft), Development Associates, 1986.

The ACT report concluded that the MMHP PROCOMSI I cost in the pilot area averaged $4.14 per year per child under 5 years old. The estimated monetary cost per death averted was $802,000.

3. TECHNOLOGY TRANSFER FINDINGS AND ANALYSIS

3.1 Knowledge of Oral Rehydration Therapy and Other Interventions

By almost any measure, PROCOMSI I was an outstanding success that made several long-term contributions to the Honduran health system. The most dramatic gains were made in the adoption of oral rehydration therapy and diarrheal disease prevention behaviors in rural areas. By 1985, the location of outlets dispensing Litrosol and the directions for its proper use had become widely known in the health regions where the oral rehydration therapy media campaigns had been conducted. Mothers interviewed in rural areas spontaneously endorsed the product as the first step in treating childhood illnesses, and even small children could identify the product or the radio personalities associated with its promotion. Although Litrosol is not yet stored in the medicine chest of every Honduran family, that is likely to become a reality in the foreseeable future.

The success of the pilot project was also a strong validation of the MMHP approach because it showed that a general communications methodology could be adapted and applied to a particular cultural setting and problem. The well-developed and well-timed research strategy of PROCOMSI I demonstrated the value of integrated, long-range planning. It also provided an opportunity to test, adapt, and use a variety of communications techniques and strategies not commonly associated with developing country project designs (e.g., marketing research, behavioral analysis, and formative evaluation).

The project also developed a cadre of young, enthusiastic professionals within the Health Education Division, who were exposed to the health communication methodology and were eager to replicate them.

Finally, and most important, PROCOMSI I offered both verifiable and replicable evidence that mass media could be an innovative and effective alternative or complement to traditional community education strategies, especially in rural areas. All of these successes encouraged the Ministry of Health and external funding agencies, particularly USAID/Tegucigalpa, to support PROCOMSI II.

The success of the PROCOMSI II health campaigns is somewhat more difficult to estimate. Evaluation reports prepared by

A.C.T.[5] on the national campaigns on tuberculosis prevention and treatment, malaria control, and immunization support conclusions that PROCOMSI II interventions are well received and are having some impact on rural community health. Overall, these campaigns have been less successful than the oral rehydration therapy campaign, but this finding is neither surprising nor negative, given the substantive differences between the two projects.

PROCOMSI II was carried out in a much larger geographic area, in less time, and with less technical assistance and fewer financial resources. This resulted in the use of a vastly shortened methodology that emphasized the use of radio over the multimedia approach. PROCOMSI II produced far more outputs and more varied outputs because it dealt with several distinct health topics, not just oral rehydration therapy. In addition, the responsibilities of the Health Education Division's technical personnel were expanded as training, supervision of regional activities, and collaboration with other health programs and sectors were added to the Division's portfolio.

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[5] See ACT evaluation reports (see Bibliography) on these campaigns for more complete discussion of project dates, methodology, and evaluation results.

Although PROCOMSI II is generally considered to be less successful than its predecessors and has not yet achieved its original objectives, it is also generally considered to be making good progress toward those objectives. This perception and the priority placed by USAID/Tegucigalpa on the uncompleted parts of the project (including the family planning campaign) have led Ministry of Health leadership to presume that additional support will be forthcoming from the Mission to continue activities in the health area and to apply the mass media approach to new sectors.

3.2 Distribution of Targeted Health Products and Services

The Ministry of Health distribution system for materials and supplies functioned reasonably well during the centrally directed mass media campaigns, and problems were not very serious down to the level of the auxiliary nurses. However, the campaign strategy created a larger problem in the health services delivery system because most of the burden for campaign execution was on the lowest levels of the health services chain, the auxiliary nurses and community health workers. There has been little or no accommodation at that level for the extra work load generated by the campaigns. This problem is likely to have

serious, long-term implications for local health services if it is not addressed in the Ministry of Health's long-term planning.

3.2.1 ORT Related Services and Supplies

An earlier report on the status of the UNICEF-supported oral rehydration therapy program in Honduras noted that the distribution system of the Ministry of Health was poor at that time, posing a serious problem for program expansion (Zeldon 1984). In the wake of PROCOMSI I, this problem seems to have largely disappeared, at least for most parts of the Ministry's health service delivery system. Supplies of oral rehydration salts were a major portion of warehouse inventories in all three of the health regions visited in 1985, and resupplying clinics was an active warehouse responsibility. Rural hospitals and clinics, also had abundant supplies of Litrosol, and health workers indicated that they had not experienced any shortages, even during the height of the radio campaigns.

Despite adequate supplies at Ministry of Health outlets, however, there are distribution problems at the community level. Litrosol, for example, is not generally kept in rural homes, and most packets are distributed only in response to an

illness, which delays the start of oral rehydration therapy and increases the likelihood of secondary health problems. Health workers justify the practice as a measure against waste and hoarding, improper use, or illegal sales, as well as a way to ensure proper treatment and followup of patients. Liberal distribution, however, would also increase work load of low-level health workers who must account for distributed supplies and have elaborate record keeping responsibilities (e.g., auxiliary nurses maintain three or four separate record systems on most clinic visits).

A related problem is resupplying Litrosol to volunteer and community workers who distribute it. Responsible for their own supplies, they often have only a small number of packets available and thus limit the number given out because of the time and effort required to obtain new supplies from health posts which may be several hours walk away. These workers consider Litrosol to be cumbersome to transport and difficult to store. Men also tend to view oral rehydration therapy as a low-prestige intervention. Consequently, motivation for keeping and distributing the product can be quite low.

A third distribution problem is the lack of alternative sources of Litrosol for Hondurans who do not use the Ministry of Health system. Most people in the campaign target areas were aware of the product and many believed it was superior to

commercially available preparations. They were willing to pay for Litrosol and expressed frustration that it was available only through Ministry outlets, which, for various reasons, they chose not to use.

3.2.2 Distribution of Supplies and Services Under PROCOMSI II

Distribution systems for the products, supplies, consumer information, and training materials for the centrally coordinated PROCOMSI II campaigns were generally good. Health workers in campaign target areas acknowledged occasional supply problems (e.g., the cold chain supporting the immunization campaign was weak, generating problems in serum availability), but most believe that distribution was adequate.

Probably the most serious problem associated with the national campaigns was not the availability of campaign related services or products, but rather the disruption in regular health services during these campaigns. Health personnel from hospital administrators to community volunteers noted that all but emergency services were disrupted during these periods because little or no additional help was available. Patient backlogs created the health by campaigns tended to remain for long periods of time, in part because no additional compensation

or incentives were offered for the extra effort demanded during the campaigns and afterwards. Auxiliary nurses, in particular felt that it took weeks to catch up with their regular activities because they normally worked in a cycle that already included a large component of fixed preventive care (e.g., innoculations, well-baby clinics).

3.3 Mass Media Technology Transfer to the Ministry of Health

The transfer of the mass media and health practices methodology and associated technical skills to the Ministry of Health can be considered on three levels in assessing the achievements to date and in identifying problems requiring resolution:

-- Honduran mastery of the methodology and ability to apply it to new situations

-- The use of the methodology in Ministry of Health activities

-- Incorporation of the approach within the Ministry of Health (institutionalization)

The PROCOMSI projects have made considerable progress in each of these areas, but success is not complete. Some of the slowness in achieving program objectives derives from two causes, which are recurrent themes in this evaluation: the differences between PROCOMSI I and II and the lack of sufficient systemwide planning for the use of mass media in the Ministry's rural health programs.

3.3.1 Accomplishments in Technology Transfer

The existence of the Health Education Division, with its staff, budget, placement within the Ministry of Health, and continued high profile in national health campaigns, is strong evidence of success in transferring the mass media, an accomplishment in the institutionalization process.

Prior to PROCOMSI I, community education activities in the Ministry consisted mainly of poster production and distribution. Through the PROCOMSI projects particularly the dedicated efforts of AED, the Ministry now has a modern health communications unit with a full-time professional staff and its own facilities. The Health Education Division also has important political and administrative support for its activities.

Other accomplishments of the Division include the development of a flexible, multimedia capability, extension of the MMHP methodology to other health problems and geographic regions, and a decentralization strategy aimed at producing mass media messages locally for use in rural areas.

In rural areas, the transfer of specific aspects of mass media technology is much less observable than the effects of mass media on the attitudes of health workers. At the broadest level, mass media health campaigns have given workers at all levels of the national health system a sense of esprit de corps with the central Ministry of Health structure. Campaigns have also strengthened the feeling among workers that local health units and even individuals who helped implement campaigns are part of an integrated system. Despite criticisms regarding some negative aspects of the campaigns (particularly increased work loads) health workers consider their participation and the overall effect of the campaign to have been positive. The specific benefits of the project noted by workers include new training programs, posters, and educational materials (highly valued, by health workers, who view the materials as "conversation openers" with clients) and occasionally, new supplies, which helped increase both worker recognition and status. Other positive elements of the project were as follows:

-- Increased awareness and enthusiasm for mass media techniques, particularly among health region communications personnel

-- Adoption of a stronger "campaign mentality" within the health regions, based on the use of PROCOMSI I project methodology in combination with more traditional communication techniques (e.g., person-to-person communication)

-- An increased understanding and use of pretesting and formative evaluation techniques in program design and an enhanced appreciation by regional personnel of the value of these techniques in waging a successful campaign

-- Greater use of client information by auxiliary nurses and other low-level service delivery personnel

3.3.2 Barriers to Technology Transfer

The Health Education Division is the primary receiving unit in Honduras for the technology developed under MMHP. It is in many ways a poorly integrated division of the

Ministry--physically isolated and directed by a nontechnical person. Expectations of the Division are high, but its mission is not well understood. There are several reasons for this, but the most important concern the origins of the MMHP project, or PROCOMSI I, as a demonstration project. This early history limited the ability to develop a solid, permanent capability in mass media methodology within the Ministry of Health. Such capability would require establishing a long-term strategy for preserving the mass media technology and broadening its base at the institutional level, developing staff with the ability and confidence to apply the technology without foreign assistance, and developing a technically competent management structure. The following examples demonstrate these shortcomings.

1. Lack of training and other programs for transferring project techniques to a broader segment of the Ministry of Health. As a demonstration program, the training objectives of PROCOMSI I were limited to preparing a few (five or six) Honduran counterparts to help carry out the technical requirements of the pilot project. These individuals worked closely with the AED staff and foreign technical experts to implement the Litrosol campaign. They remained with the project as staff of PROCOMSI II and eventually became the technical core of the Health Education Division.

Training for Hondurans has been a low priority for the PROCOMSI projects. It is significant that in the first 3 years of the project, only one training seminar was conducted, and that was part of the Stanford evaluation activities, not part of the mainstream program.

Not until 1983, after the project was extended, were steps taken to conduct a conference for regular Ministry of Health personnel. At that time, three seminars were conducted for the central Health Education Division staff and some field staff. In 1984, these were followed by a fourth workshop in radio production.[6] Still later, under PROCOMSI II, 35 Hondurans participated in a national seminar on communications in health education, and three local workshops on radio production were conducted in Comayagua, Choluteca, and Juticalpa.

In the 1984 reorganization of the Health Education Division, the size of the unit was increased, but the number of staff with MMHP technical skills remained at five. This small group continues to be responsible for the centrally conducted national campaigns and is the Ministry's only mass media technical resource, although interest in the use of media has grown. Except for the limited training they provide to regional

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[6]This workshop was organized and supported by the Population Communication Services project at the Johns Hopkins University.

coordinators in conjunction with the national campaigns, these staff members have no way of their knowledge with other parts of the Ministry of Health, and they had not, in 1985, transferred their skills to other members of the Division.

Professionally and emotionally, this group still identifies more strongly with AED and PROCOMSI than with the Ministry of Health; most privately conceded that they were not enthusiastic about having their appointments turned into regular Ministry positions. One former employee of the project even refused this option, and AED arranged for him to continue working on the project as an employee of another American contractor.

In the absence of an explicit training strategy, the Ministry's current mass media initiative is dependent on the continued employment of members of this small group. Given the group's probable lack of strong institutional commitment and the technical difficulty of replacing them, the long-term role of mass media in health programs is vulnerable.

2. Lack of management and administrative skills among the Health Education Division technical staff. The history of strong AED expatriate management, which was an important factor in the success of PROCOMSI I, is now a liability for the Health Education Division. This is due primarily to the subordinate technical roles of Honduran counterparts during earlier project

years, which have been perpetuated in the Division. None of the former PROCOMSI staff has assumed leadership or management roles, and the Health Education Division has no technically competent Honduran who can represent the Division to the Ministry. Instead, it is represented by two managers who probably have a somewhat negative effect on the Division's integration into the national health program.

The AED resident expatriate adviser is still the de facto project leader, although his role was supposedly reduced in 1984 to give the Division staff more management responsibility. The former PROCOMSI staff defers to this adviser on most matters, and his advice is sought and followed on most substantive decisions. During the evaluation, he was protective of the Division staff, defensive about the project, and aggressive about the need for continued management assistance to avert problems. Although this management style[7] was successful during PROCOMSI I, it is probably a less useful posture now for discussing a Ministry program with A.I.D. and Ministry representatives.

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[7]The exclusion of the Honduran staff from the social gathering given by AED for the evaluation team in Tegucigalpa was apparently typical of the contractor's management style.

The approach of the Ministry-appointed director of the Health Education Division is the opposite of that of the AED adviser in many ways, but he too is not the best spokesman for obtaining better project integration and greater stability for the Ministry's mass media initiative. Appointed in 1984, neither he nor his deputy are thought to have the experience needed to take an active part in the Division's decision-making process. The director, for his part, also seems tentative about his role in Division affairs. Although overtly enthusiastic about the Division, he does not discuss plans for expansion, integration of activities into other programs, or new initiatives. He seems, in short, only peripherally involved with the actual project and directs most of his attention to being a "facilitator" in the Ministry's political process.

3. Reliance on foreign technical assistance and training. To a large extent PROMCOMSI I is perceived as a foreign rather than a Honduran success. The Health Education Division staff members generally expressed confidence when discussing the implementation of PROCOMSI II. Nevertheless, they strongly emphasized the need for external project support, particularly foreign technical assistance and additional training for themselves. The staff also rejected the possibility of adequately meeting these needs with only Honduran resources (e.g., use of Honduran private sector advertising and marketing firms).

This belief in the superiority of foreign inputs is to some extent self-serving, but it also highlights the Division staff's conviction that future program success is really dependent on foreign participation.

3.4 Long-Term Prospects for the Technology

Project costs and Honduran budget constraints combine to pose the greatest impediment to a long-term role for the MMHP methodology in public health and other national efforts. For reasons unrelated to the project, proponents of health education and preventive medicine will have to overcome formidable obstacles to obtain significant new funding from national revenues, and external funding will continue to be essential in the short run.

Apart from the fundamental issue of whether national funding will be made available, there are four other significant elements affecting long-term prospects. These elements are the outcomes of a successful pilot project, widespread interest in maintaining project momentum, and USAID/Tegucigalpa funding, which the Hondurans expect to continue in the years ahead. Briefly, the elements are as follow:

-- Considerable enthusiasm at all levels for wide spread use of mass media approaches in public sector programs

-- High, and usually unrealistic, expectations about the future impact and accomplishments of the PROCOMSI II program and its follow-ons

-- Rapid, unplanned growth in using the MMHP methodology in Ministry programs and, more recently, in other sectors, through AED and Health Education Division technical assistance

-- Lack of systemwide policies or planning governing the growth and impact of mass media on the larger health system

These characteristics affect the long-term use of the MMHP methodology, which is explored in the following considerations: political and administrative leadership, the program's level of effort versus anticipated gains, and program expansion and replication.

3.4.1 Political and Administrative Leadership

In many ways, Ministry of Health leaders express conflicting opinions about the PROCOMSI projects. On one hand, there is much overt support. On the other, there is ambivalence about both phases, particularly about the exact role that the users of mass media can and should play in Ministry programs.

Although Ministry officials are very positive about PROCOMSI I and its accomplishments, most know very little about the MMHP objectives or the mechanics of its implementation. In fact, the independence of PROCOMSI I from normal Ministry supervision and oversight is considered its most salient feature and its only perceived shortcoming. In contrast, PROCOMSI II is clearly seen as a Ministry initiative for which there is strong political and administrative support. In public discussions, the emerging Ministry view is (1) that PROCOMSI I was a research project that proved the effectiveness of the use of mass media in health projects, (2) that PROCOMSI II is the logical expansion of this proven technology to other health projects, and (3) that more interventions and funding are desirable and expected.

The Ministry's official position on PROCOMSI II is only partially reflected in the personal views of its leadership. Optimism about the project is nearly universal, based on the

perception that it is an innovative and successful health program. In terms of the specific use of mass media, views are more complicated.

Many Ministry personnel believe that they were not sufficiently involved in the decision to pursue PROCOMSI II, and a few consider the project, generated and paid for by USAID/Tegucigalpa, to be a U.S. initiative. Although there is verbal support for the health campaigns, Ministry officials seem unclear about the overall utility of the approach in the health portfolio. They are also vague about their specific expectations concerning the project, other than that it be a "success" like PROCOMSI I.

There also seems to be little understanding of how to effectively use the media resources available through the Health Education Division, and there is confusion about the Division's function, mandate, funding, and general status.

Finally, if willingness to allocate Ministry resources can be used as a measure of commitment to mass media technology, is be significant that PROCOMSI II is supported largely through the Health Sector I project. Plans for continuation and expansion of this initiative are firmly tied to foreign assistance funding, and there is a decided reluctance to discuss the future of mass media in health programming in the absence of foreign interest or economic support.

3.4.2 Level of Effort Versus Anticipated Gains

The PROCOMSI II effort differed from its predecessor in several important ways. Although AED continued to provide technical management and guidance through resident expatriate advisers, most other primary inputs changed. This raises the issue of whether technology that has been applied successfully under almost ideal conditions can continue to work effectively with a decreased level of effort and to retain the support of top decision-makers. It is too early to make such as determination about the second phase of PROCOMSI. There are some indications, however, that Honduran expectations for the project are unrealistic. Meetings with Ministry leaders who are interested in or have control over the project indicate that they expect PROCOMSI II to be as successful as the earlier phase supported by the MMHP project. When asked specifically about differences in the levels of effort, one Ministry leader said that PROCOMSI I was the "experiment that showed it [the approach] would work," a belief apparently shared by others.

Discussions about differences in levels of effort are further complicated by the lack of a clear understanding of what made PROCOMSI I successful. Most Hondurans, including some members of the Ministry who had regular contact with the project, have only a vague idea of the technical and financial resources that were

instrumental in its success. Most Ministry officials have no idea of the level of A.I.D. investment in PROCOMSI I or of the implications of the AED "technical overdrive" in the project's implementation. They naively and erroneously assume that the project was a small intervention in a small geographic area that, having proved the usefulness of the mass media approach, could be replicated on a larger scale with local resources.

3.4.3 Program Expansion

The two aspects of program expansion--expanding the target population nationally and expanding the mass media technology to include programming and production at the regional level, have completely different implications. The target expansion is commendable and, given the reasonably homogeneous population of Honduras, applies the fixed costs of central staff, testing, and production over a larger base, reducing average cost per targeted individual.

However, the effort to set up miniature planning and production units in each region is dubious, at best. The decision to decentralize the national health campaigns in order to apply the MMHP methodology and mass media techniques at the regional and community level was made in 1984 in response to a consultant's

suggestion. This decision was not supported by empirical information on differing program or population needs among regions, nor were estimates made of regional ability to use or financially support this modern technology. The decision was, however, consistent with a new Government plan for making community health programs more self-sufficient through the expansion of volunteer networks and greater emphasis on preventive medicine.

Since its introduction, this aspect of regionalization has not been particularly successful, raising questions about its appropriateness as a long-term strategy. Because radio is the most frequently used vehicle for applying mass media to local health initiatives, it provides good examples of the problems of local-level use of mass media.

The regional coordinators of the Health Education Division have been both enthusiastic and aggressive in their use of radio. Most have received initial training from the Division in radio production and have devoted much time and energy to making radio spots (and, sometimes, supporting graphic materials) for local use. To support this work they recruit local actors and other help, solicit funds and free radio time, buy their own materials, and regularly solicit the Division for budget support and technical assistance. Nevertheless, their projects usually fail--and for many reasons.

Demands on the time of the Health Education Division staff make it impossible for them to provide backup for local media projects or provide technical assistance. Materials sent to Division offices were generally not reviewed. Local radio projects are rarely completed on time, or they never materialize, and promised PROCOMSI II support for radio time is dificult to arrange. Regional coordinators complained of feeling isolated and somewhat abandoned. They also believe that their inability to follow through with projects has hurt their credibility. Opportunities to use new interests and skills were few, and two of the three coordinators interviewed during this evaluation were considering leaving their jobs and finding new positions. Finally, at the regional administrative level, there was little support for the coordinator's efforts. In two regions, the chief administrators believed that community health education had a low priority in their own portfolios. One flatly stated that he had neither the interest nor resources to support local mass media efforts, including radio, because of the priority given curative services.

In sum, evidence suggests that the use of mass media has been introduced at levels with insufficient human or financial resources to support it. Although the need for local mass media programming may grow in rural areas, the problems encountered with this phase of regionalization are early warning signals that the use and diffusion of the modern technology has limits and that other, older approaches are sometimes more appropriate.

3.4.4 Replication in Other Health Areas and Public Sector Projects

The risk of overextending the Honduran technical staff or, alternatively, of placing ever more reliance on AED or other advisers is an important consideration in the long-term outlook. Either of these circumstances would undermine development of a strong, indigenous capability. There is also the possibility of oversimplifying the methodology, of lowering the level of thoroughness and quality that it had during the original demonstration project, or of saturating the Honduran capacity to absorb this approach. Thus the possibility exists of generating a backlash against the approach, especially if there is a tendency to oversell prospective impacts to obtain Honduran concurrence for rapid expansion to other substantive areas.

3.5 Relationships With the Private Sector

Since the PROCOMSI projects were started, private and commercial resources have gained increasing importance in A.I.D. programming, and a growing number of other USAID/Tegucigalpa-supported projects are using Honduras's active commercial sector.

Exclusively private sector development would have been inappropriate for the PROCOMSI projects, but in both the early and later phases, there was room for involvement by private voluntary organizations and for the inclusion of elements of the Honduran business community. Although this would have been of greatest benefit to the health product distribution and behavior changes being introduced, this development would have also applied, albeit to a lesser extent, to the use and promotion of mass media technology.

3.5.1 Private Voluntary Organizations and Social Marketing Technology

PROCOMSI II and the ASHONPLAFA Contraceptive Retail Sales (CRS) project have different objectives, but in many respects their strategies are similar. Although they do not collaborate and have no plans to do so, there seems much that they could share and should be encouraged to share in this area. PROCOMSI's elaborate methodology and exhaustive market research, as well as its 5 years of experience with Honduran radio, would be of much use to the newer project, particularly in light of the contractor's (TRITON) emphasis on rapid startup and implementation. More important, the Contraceptive Retail Sales

project's use of private commercial outlets and Honduran advertising agencies could provide the Health Education Division with valuable information for directing future activities.

Private voluntary organizations in Honduras are generally aware of the PROCOMSI project, and there is some informal contact between their personnel and AED staff in Honduras. There is no evidence, however, that private voluntary organizations are in direct contact with the Health Education Division staff on the project or that they are involved in the transfer of PROCOMSI-generated information or technology.

3.5.2 The Commercial Sector

The marketing and advertising mechanisms used in the MMHP project were based on commercial sector models applied to social goals, but local private sector resources were not incorporated in project implementation. The use of Honduran marketing or advertising staff might have accelerated some of the work, thus cutting the costs associated with setting up the Health Education Division and training its staff. It would also have ensured the involvement of other Honduran professionals with project activities.

The success of the Litrosol demonstration effort and the problems in expanding, it nationally suggest that a wholly public sector response is insufficient. In expanding the rural, public sector emphasis of the pilot project, the Ministry of Health eliminated two large overlapping populations of potential users who rely mainly on the private sector for health care: urban dwellers and families who use private physicians and pharmacies for their health education and medical care. Although a commercial brand of oral rehydration salts is available in private pharmacies, it is expensive, has too much sugar (making its effectiveness questionable), and was recommended by pharmacists queried by the team only after antibiotics and Kaopectate-type products were rejected.

The involvement in the project of commercial outlets such as pharmacies might be a low-cost, high-impact addition to the Honduran strategy. For example, distributing litrosol through commercial pharmacies would relieve the distribution constraint posed by the dependence on Ministry of Health outlets, which are inadequate to meet the demands of a national program (Zeldon 1984).

Cost recovery was not an issue in PROCOMSI I and II, but it may be important in efforts to distribute Litrosol, or a similar product, more widely or to expand and reinforce new health behaviors. If Litrosol is made available through the private sector it could generate some income, either for PANI or for some

other institutional mechanism that might be established as a result of the divestiture deliberations. Private sector marketing would also make Litrosol (available to unserved markets and would probably increase its acceptance among those who use the Ministry system. At present, Ministry policy opposes the introduction of cost-recovery mechanisms, but the Ministry should at least consider allowing non-Ministry health personnel at the rural end of the Ministry health system (traditional midwives and community health volunteers) to receive a modest payment for their efforts in stocking and distributing supplies.. This would increase their motivation to promote oral rehydration therapy, thus and remedying a current flaw in the rural distribution system.

3.6 Cost Analysis

Cost analysis of MMHP activities in Honduras is limited by the absence of basic information on expenditures. The best effort to date is the ACT report which uses information obtained from AED records and other information provided by A.I.D./Washington and USAID/Tegucigalpa. It is, in fact, the only resource which attempts to include information from the project's major funding sources for a single period of time. It concludes that over the period 1980-1982 (PROCOMSI I) the MMHP cost per year per child under 5 years of age in the target area was $4.14, a figure which the ACT authors felt was very cost effective.

The evaluation team feels that this figure may be misleading and that the actual costs of the project were probably higher--in total costs of the project and in average cost per child. This conclusion is based on three points.

1. The basic measurement. First, using a measure based on average cost per year is misleading since the project wasn't conducted in one year. Another way to present the data would be to multiply the average cost per year, $4.14, by the three years of the project, to obtain project costs of $12.42 per child under 5 years of age. Still another way to state the costs using the figures in the ACT report is to divide the roughly $632,000 in current dollars said to have been spent over the years 1980-1982 by the number of children under 5 years of age in the pilot area, (83,700), which yields a project cost of $7.55 per child. These numbers are inconsistent with each other but the information in the ACT report is not sufficient to resolve the differences. It seems reasonable to conclude, however, that the $4.14 per year per child is not a desirable way to characterize costs, even if the data underlying it were correct.

2. Incomplete cost accounting. Second, the ACT report appears not to include all direct project outlays for the period. Total project outlays for 1980-1982 were estimated in the report at $632,000 in current dollars ($1,040,000 in 1985 dollars). However, the report's total outlays do not include any of the

evaluation costs incurred by Stanford University although this contractor played a role in project development and implementation as well as conducting the impact study.

The limited data on USAID obligations for the project also supports the conclusion that the ACT figures are not complete. Table 2 may not be complete, but the frequency, magnitude, and timing of obligations as shown in this table suggest strongly that outlays using Mission funds were higher than evidenced in the ACT figures.

3. Attribution of various resources to the project. Finally, the report contained references to inputs for MMHP activities in Honduras in addition to those of the prime contractors and USAID/Tegucigalpa. These additional resources, which were often mentioned casually as "having worked with PROCOMSI I," could not be easily quantified and confirmed. They were said to have originated with or flowed through A.I.D./Washington; USAID/Tegucigalpa; AED and Stanford University; ACT; other subcontractors and consultants; other A.I.D.-supported projects such as Population Communications Services at Johns Hopkins University; and other subprojects of the Health Sector I Project, the Ministry of Health, and other donor agencies such as PAHO and UNICEF. If inputs from these organizations had a role in the success of the project, then there should be some estimate of their contribution when calculating project costs. The evaluation

team found it impossible to assess the implications for overall cost effectiveness, except to strongly emphasize that the previously cited ACT report figures understate the resources contributing to project success.

An additional complication confounds any effort to obtain clean and complete cost figures. It is possible that some Mission funds also appear as Ministry of Health inputs in cases where Mission funds flowed through the Ministry. This would result in the double-counting of some funds and the misrepresention of actual Honduran contributions to MMHP activities.

4. LESSONS LEARNED

The overwhelming success of the Litrosol campaign and the diarrheal disease control program have tended to divert attention from the most valuable project lessons--that mass media can be a powerful and efficient tool in public information programs and that the approach can generate and help sustain a wide and complex set of behavioral changes, even in behaviors that are normally resistant to change, such as those related to child care.

From this perspective, the PROCOMSI projects provide insights in to several issues of particular interest to effective

technology transfer--the utility of a general methodology that can be applied to many developing country settings; the process (and problems) of institutionalizing a new technology within an older, existing structure; and the role of cost and sustainability in technological interventions.

4.1 Demonstration Versus In-Country Projects

The PROCOMSI projects provide an opportunity to draw several conclusions about the relationship between demonstration projects and more typical in-country development programs.

1. A demonstration project can overcome much traditional resistance to a new technology. Successful demonstration projects may help to dissolve political and bureaucratic resistance to new approaches and technology and may radically shorten the period for acceptance and adoption of new approaches during a subsequent expansion of activities. As such, implementation of follow-on or similar new development projects is easier, even though they may contain some important differences.

Ministry leadership considered the "problem" of PROCOMSI I to be its autonomy, which isolated the project from regular Ministry

activities and control. It is unlikely, however, that the project would have been as successful had it been subject to regular Ministry financial and bureaucratic processes.

Although PROCOMSI II differs from the demonstration project in many important ways, it has had a very quick start, encountered few bureaucratic snags, and enjoys strong support from Ministry of Health leadership.

2. Variables that contribute to the success of a demonstration project may be unrelated, or even antithetical, to the success of regular country development projects. The advantages expected to accrue to a project that is a continuation of a successful pilot project never materialized for PROCOMSI II. In fact, many elements that contributed to the success of PROCOMSI I (autonomy, expatriate management, liberal funding, extensive technical assistance) were liabilities for its successor. Indeed, PROCOMSI II faced most of the problems experienced by a new project (integration, political support, competition for resources, and soon) and coped with many negative legacies from PROCOMSI I (ambivalence within the Ministry of Health, new and unskilled management, and the pressure for equivalent success but with sharply reduced resources).

3. A demonstration project typically works against local mastery, adaptation, or institutionalization of the technology. A

demonstration project will typically transfer technology to the extent that it uses the technology in the host site and familiarizes local staff with it, but such a project can also work against local mastery, adaptation, or institutionalization of the technology. The short-term goals of PROCOMSI I, however, dictated the extent and quality of the technology transfer, and its design included no mechanisms for ensuring the long-term survival of this technology in Honduras. Training was limited to technical skills for a few Honduran counterparts, but because the methodology had only a single application, the Hondurans had little opportunity to learn indepth or to adapt the approach to a different setting and almost no chance to gain management skills.

In short, the demonstration project provided little chance for the local staff to gain experience and confidence in the following areas:

-- Representing themselves and the technology within the institutional framework of the Ministry of Health

-- Adapting and applying the technology successfully without foreign assistance or oversight

-- Training others in the use of the technology

Time and experience with PROCOMSI II have given the Health Education Division staff some of these skills. After 6 years of project implementation, however, survival of the PROCOMSI technology in the Ministry of Health system is still dependent on these few Hondurans.

4.2 The Role of Planning in Technology Transfer

1. Systemwide planning must be included in project design, especially on the effects of the new technology on the receiving system and its personnel. The PROCOMSI projects appear not to have included specific provisions for assessing the impact of the mass media technology on the health system, particularly on changes in job responsibilities and work loads. As a result, the introduction of mass media technology and, specifically, the centrally directed health campaigns, generated problems at the end of the Honduran health delivery chain. Although these problems may not have endangered the program, they certainly slowed the acceptance of the health interventions being promoted.

In the course of field visits, the team found that the two most obvious effects of the new technology on the receiving system were (1) a shift to the lowest levels of the health service delivery chain (auxiliary nurses, promoters, guardians, and the

like) of responsibility for meeting new health demands generated by the central-level campaigns and (2) problems with coordination between the centrally generated and administered health campaigns and on-going regional programs.

In combination, these effects have created problems, such as overburdened personnel who feel thay cannot adequately meet both campaign expectations and regular job requirements, lack of coordination between the media campaign and product or service availability, and inadequate coverage of normal health services.

These problems are not easy to address or resolve. They suggest, however, that future projects involving mass media health campaigns should include early and more complete assessment of campaign effects on the entire health system, including regional and even local programs and priorities.

2. Systemwide strategies for technology transfer should be developed early. The decision to expand the use of mass media approaches and technology to the regional level through decentralization was dictated largely by the necessities of the PROCOMSI II scope of work, rather than anticipation of Ministry of Health needs or long-term planning. As a result, use of the highly sophisticated MMHP project methodology and the associated technical skills was expanded to new areas without a review of its appropriateness for local application. Although regionalization

has helped identify and provide training to some staff with talent for this work and has resulted in a few locally produced radio efforts, in general, it has not resulted in successful use of mass media at the community level. Problems have ranged from job dissatisfaction among regional coordinators, to competition for scarce resources in regional budgets, and resistance or hostility to local mass media programming by regional directors.

Overall, regionalization may have been a plausible short-term approach to the diffusion of mass media use, especially as it produced a cadre of qualified personnel who improved the effectiveness of national campaigns by providing an interface with local systems. Experience suggests, however, that regionalization is an inadequate and perhaps disruptive strategy for the long term because it generates expectations that existing human and financial resources cannot meet. More important, experience shows the vital role that an early, comprehensive approach can play in the use and survival of new technology.

4.3 Distribution Systems and Consumer Demand

New technologies generate new patterns of consumer use, necessitating new policies and distribution strategies to enhance diffusion. The product and service delivery systems associated

with the PROCOMSI projects have generally met the immediate needs of the mass media campaigns. The campaigns themselves, however, have generated new types of consumer needs (e.g., for Litrosol packets "on-the-shelf" at home) and new markets for products and services (e.g., urban populations and those using private health care). This suggests that periodic review of the distribution system from the consumer perspective may identify both unmet demand and areas for program expansion. The Litrosol campaign, as the oldest of the health interventions promoted under PROCOMSI, offers two areas for change: Ministry of Health policy on not providing packets to families in advance of need and expansion of the current distribution system to include the private sector.

The success of the community education program on the cause and treatment of infant diarrhea and the increasing demand for Litrosol has overtaxed the current distribution system. Despite current health worker resistance to dispensing the product liberally, the fact that 75 percent of all incidences of diarrhea are treated in the home suggests that the use of oral rehydration therapy would be improved if Litrosol were available in the home before an illness occurs. Many of the current barriers to early treatment and expanded product use and distribution could be eliminated by policy guidance and health worker training to shorten the Ministry of Health "loop" in home treatment and expand noncrisis-oriented distribution.

The success of the Litrosol campaign has also indicatd that there is a role for some type of private sector component in product distribution. Among low-level health workers, for example, authority to charge a very small fee for Litrosol could defray costs incurred for product resupply and storage, probably making it more readily available in the community. At the other end of the social and economic spectrum, the inclusion of pharmacies and other commercial outlets would make Litrosol available to those who do not use the Ministry system. Although the exact mechanisms may vary by product or service, private enterprise strategies, which were not anticipated in the Ministry's original distribution plan, clearly have a place and can contribute to the survival and expansion of mass media use.

4.4 Sustainability

1. The sustainability of the process technology (the mass media/social marketing approach) is a function of its flexibility and adaptability to new products or services. The mass media approach in Honduras remains in use largely because it has been found to be applicable to new situations: application nationally of the pilot area oral rehydration therapy techniques, and application to other public health interventions (immunization, malaria control, tuberculosis prevention and treatment), to

fertility and contraception, to water and sanitation programs, and, subsequently, to agriculture. The flexibility and adaptability of the mass media approach have been demonstrated.

2. The absence of cost-recovery mechanisms makes new technology vulnerable to budget cuts. All of the uses of the MMHP approach in Honduras have been highly dependent on external funding. The problem of financial sustainability has not been resolved. It was not considered explicitly in PROCOMSI I, and it is not a major consideration in the Health Sector I projects, although local staffing costs have been incorporated into the Ministry budget. At the time of the team's visit, there were no specific plans for a cost-recovery mechanism that would enable the Ministry, or the Honduran private sector, to continue using mass media programs if foreign assistance were to decrease or close completely.

The Ministry's plan to consider the transfer of Litrosol production to the commercial sector is commendable, but it is product-specific and aimed at lowering production costs and increasing market size. It does not address the wider issue of sustaining the hard and soft technology supporting the use of media in this project and other Ministry community health programs.

The failure to make PROCOMSI II financially self-sustaining makes the project, and the development approach it promotes,

extremely vulnerable. In policy changes or funding reductions at any point in the current financial chain would cause a sudden decline in effective health education and, eventually, would nullify previous advances. Without continuing reinforcement of the new health behaviors, even those who have adopted oral rehydration therapy will revert to their previous behavior.

Both in PROCOMSI II and in future applications of this approach in developing countries, planners should include at least a modest cost-recovery mechanism and a phasing process that would allow sponsoring agencies (in this case, the Government of Honduras) to assume the recurrent cost of maintaining an appropriate level of media support for its priority programs.

4.5 Replicability

The MMHP project offers three interrelated lessons on replicability:

1. General methodologies developed under demonstration or pilot project conditions will facilitate the introduction of similar projects and technologies in other settings.

2. Under favorable conditions, new technology can have considerable impact on targeted behavior.

3. Evaluation strategies that are built into the design of demonstration projects provide baseline data that can guide later replication efforts.

The PROCOMSI experiment in Honduras has helped to provide a blueprint for future media-based projects by developing and testing a general methodology and by thoroughly documenting its implementation through a parallel evaluation process. These components directly contributed to the success of PROCOMSI I by interactively guiding activities and identifying problems. The PROCOMSI experience can guide other applications of the project approach by identifying both the problems to be expected when new technology and methods are introduced and the solutions most likely to preserve project momentum and impact. Both PROCOMSI II and the extensions of the project in other parts of the world suggest that the general methodology and the parallel evaluation process are useful tools in the development of community health education and mass media initiatives in other developing country settings.

The PROCOMSI projects have also demonstrated that, under favorable conditions, the use of mass media to achieve socially desirable goals is an effective and attractive alternative to more

traditional health education techniques. Flexible and relatively inexpensive, mass media can be a compatible addition to the "toolbox" of public sector agencies. As PROCOMSI II has shown, however, it is not a panacea and cannot be expected to be free or to have equal success in all settings. Careful selection of the social goals and areas of implementation, long-range planning, adequate financing, and a sustained source of technical expertise are as important as the innovativeness of the basic technology in ensuring its successful application.

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APPENDIX A

EVALUATION METHODOLOGY

The experience with mass-media and health practices activities in Honduras was selected for study because it presented an opportunity to examine the use of a new technology in a small pilot program and its transfer to other regions. A preparatory workshop was held in Washington, D.C. to discuss the project with officials of the Agency for International Development (A.I.D.) and representatives of the contractor, the Academy for Educational Development (AED). Discussion of the issues and development and refinement of the scope of work during the workshop linked the field study to the aims and objectives of the evaluation series on technology transfer and marketing.

Fieldwork for the study was conducted in Honduras by a four-person, team from September 21 to October 12, 1985. The team consisted of Scott Edmonds, DPH, team leader, formerly a career Foreign Service Officer with A.I.D.; Melody A. Trott, Ph.D., who was detailed from the Information and Education Division of A.I.D.'s Office of Population; Antonio Cabezas Estaban, Ph.D., of Radio Netherlands in Equador; and Charles A. Lininger, Ph.D., Office of Research, Statistics, and International Programs, U.S. Social Security Administration.

Sandi Amendola of A.I.D.'s Center for Development Information and Evaluation conducted a preliminary site visit to the USAID Mission to gather project-specific information in early September. During this time she also visited several rural health clinics. She briefed the team during the preliminary workshop.

The study team spent 3 weeks in Honduras. Interviews were conducted in Washington, D.C. and Honduras with personnel associated with the projects since they began in 1979. The team also visited several active project field sites and conducted interviews with health workers and the client population.

In the field the team was ably assisted by USAID/Tegucigalpa and Honduran officials. Anita Seigel, USAID/Tegucigalpa, worked with the team daily and provided important background on the project and Honduran institutions. Lic. Maria Rosa Bonanno, of the Honduran Ministry of Health, developed the program of team interviews conducted in Tegucigalpa. Dr. Luis Roberto Escoto, also of the Ministry of Health, coordinated the visits to rural health regions and accompanied the team to provide background on the extension of the national program in these areas and to assist in interviewing.

SCHEDULE

Stage 1. Washington, D.C.: Team briefing, data collection, issues meeting, refinement of scope of work.

Stage 2. Honduras, first week: Orientation meeting with Mission, identification of key informants, Introductory meetings with the Ministry of Health, visits to pilot area, visits to Ministry offices using media technology.

Stage 3. Honduras, second week: Visits to Ministry of Health facilities at two levels in two areas of the national program, interviews with clients (mothers, physicians) and health workers regarding knowledge/use of oral rehydration therapy technology, visits to private sector stores, pharmacies.

Stage 4. Honduras, third week: Analysis of results of visits, writing of draft report, debriefing with USAID/Tegucigalpa, team departure.

Stage 5. Preparation of final report

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APPENDIX B

METHODOLOGY OF MASS MEDIA AND HEALTH PRACTICES PROJECTS

The Academy for Educational Development (AED) in 1985 summarized the overall methodology of the mass media and health practices activities in Honduras in the following seven steps:

1. Define, through village-level and other research the health problem, who it affects, how those affected understand and respond to the problem, what obstacles they are likely to encounter, and how they can best be influenced to adopt.

2. Segment general audiences into smaller groups, according to similarity of views on the problem, thus permitting more effective information to be directed at each group.

3. Use behavioral analysis techniques to create messages/ products that effectively address the problem, that take into account the real-life constraints on the audience segment, and that are attractive compared with other alternatives facing that segment.

4. Pilot test, and then adjust if necessary, messages and products to ensure they meet the requirements.

5. Ensure the ready availability of any materials, supplies, or equipment needed to take advantage of the information being promoted and ensure that health system personnel are appropriately trained.

6. Select a single set of coherent themes to be transmitted through all available communication channels (e.g., radio, print, face-to-face) to ensure that the audience receives the same messages from more than one credible source and to maximize the particular strengths of each communication channel.

7. Monitor all inputs through repeated mini-evaluations of selected outputs to determine whether the elements of the strategy are in place and functioning and to identify necessary changes.

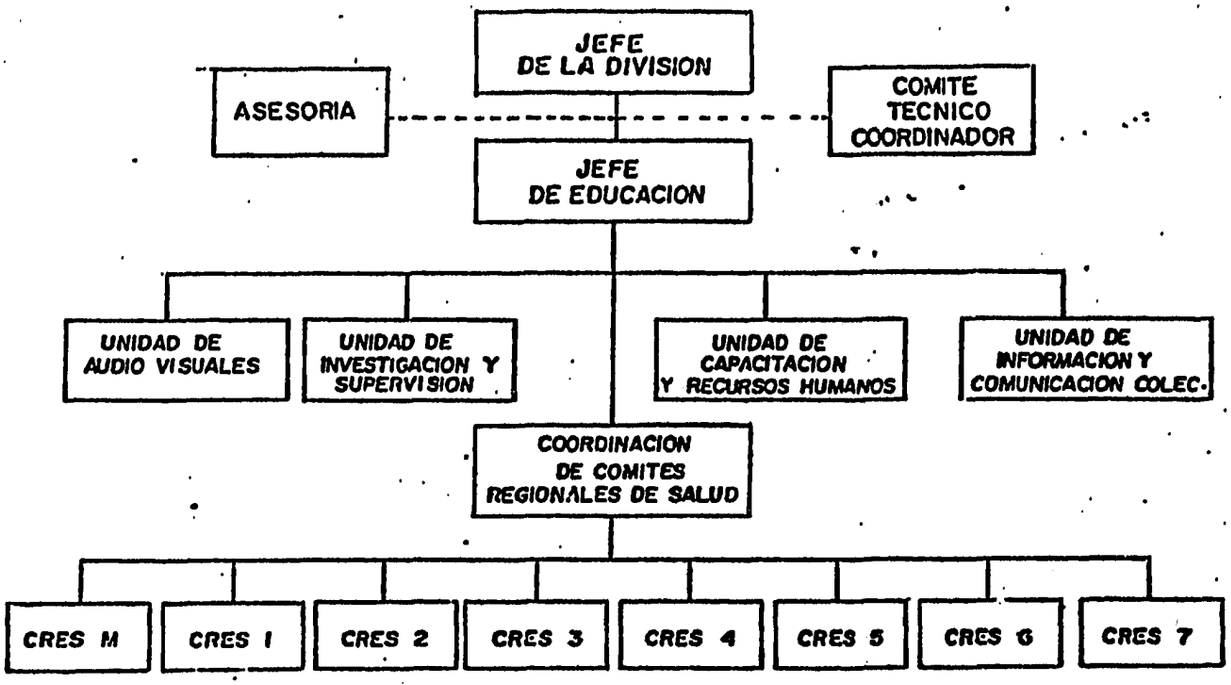
AED also argued for the need to integrate these activities with the policies and procedures of the overall service delivery system.

APPENDIX C

ORGANIZATION OF THE HEALTH EDUCATION DIVISION

During 1980-1985, the Health Education Division of the Ministry of Health operated under five different organizational structures which are shown in the following chronologically arranged figures. They show both the growth of the Division over time and the formal changes in the roles of the expatriate advisers and national staff. In 1980, for example, the Division had only two Ministry of Health employees; The Academy for Educational Development (AED) added three persons to the Division staff, using contract funds. In 1985 the Division had 15 employees.

1985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COMITE TECNICO COORDINADOR
JEFE DE EDUCACION
UNIDAD DE AUDIO VISUALES
UNIDAD DE INVESTIGACION Y SUPERVISION
UNIDAD DE CAPACITACION Y RECURSOS HUMANOS
UNIDAD DE INFORMACION Y COMUNICACION COLEC.
COORDINACION DE COMITES REGIONALES DE SALUD
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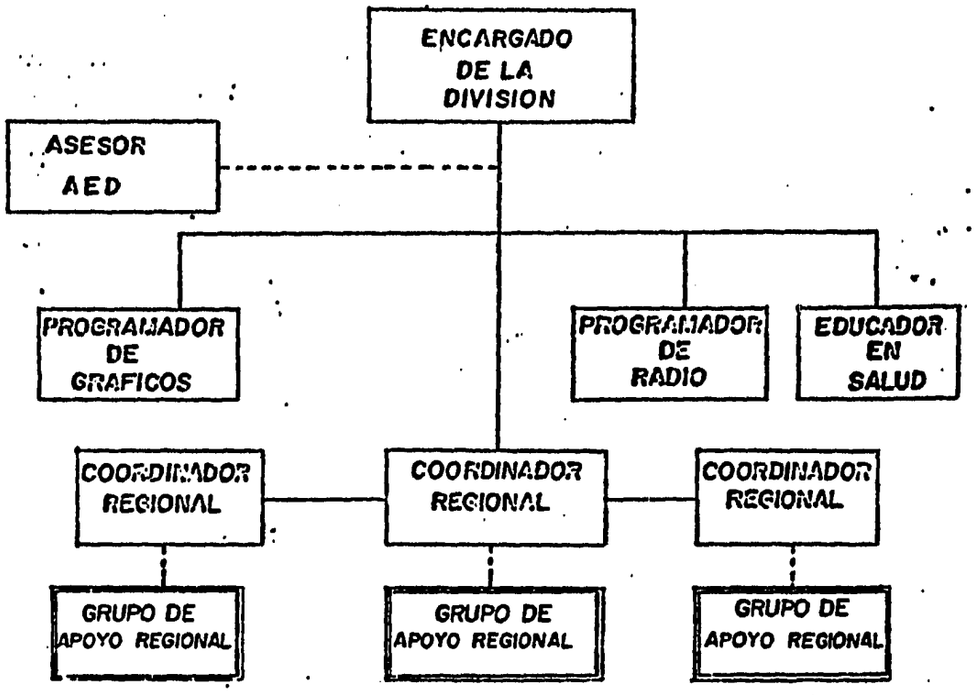

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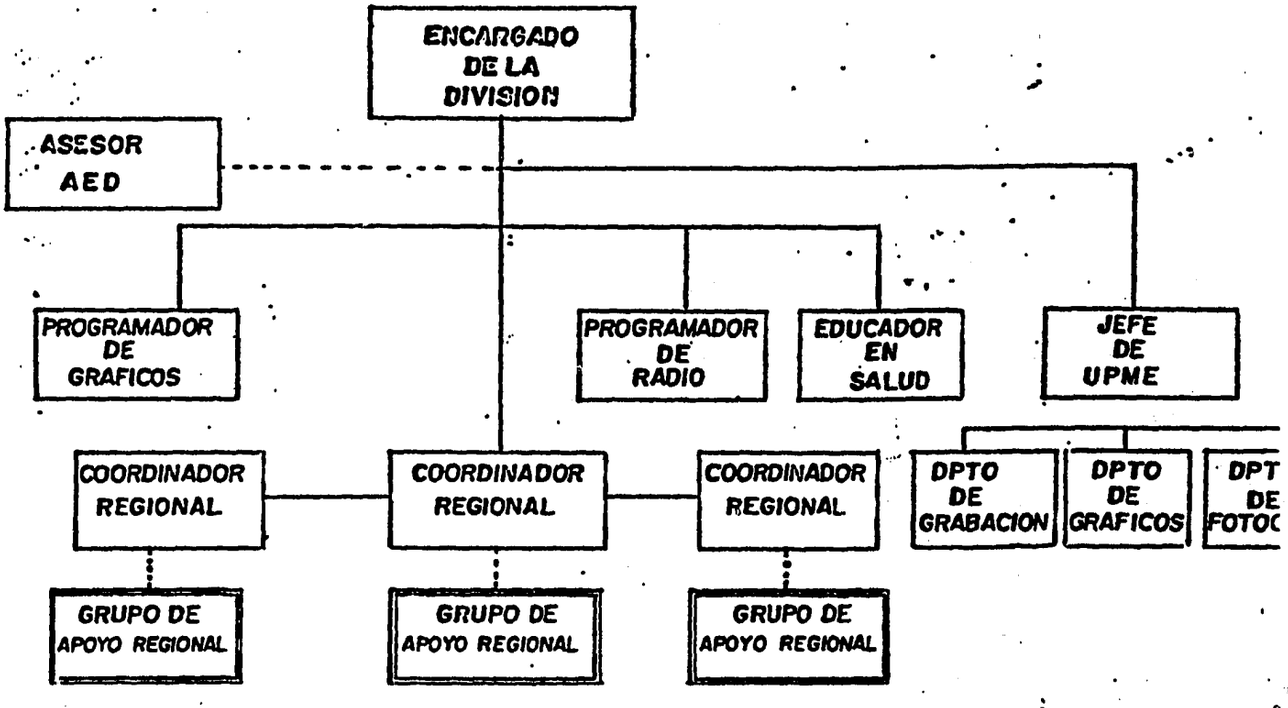

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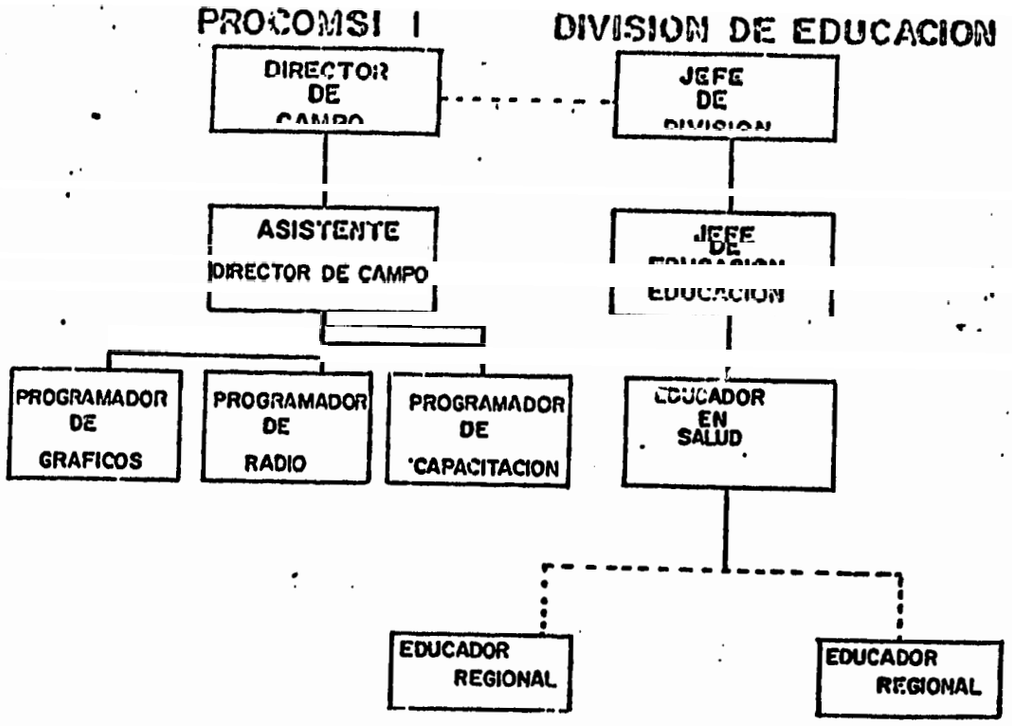

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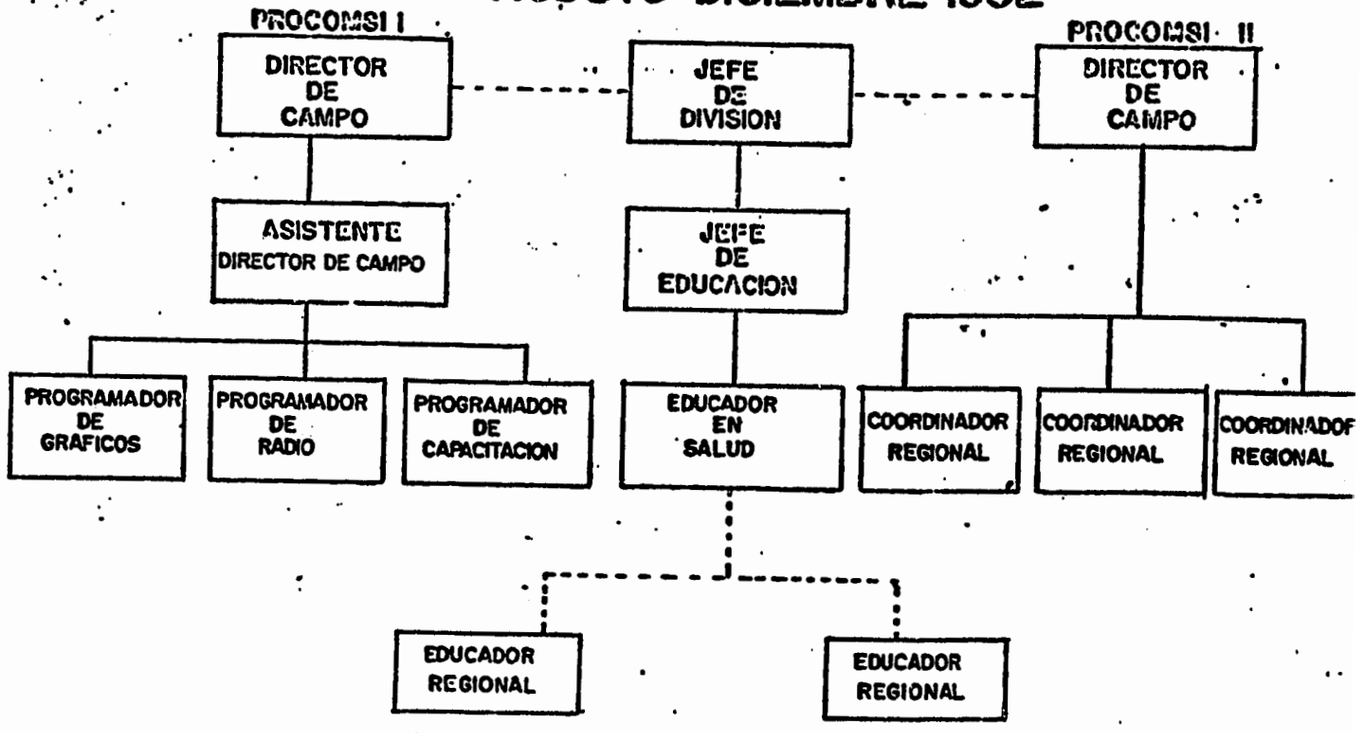

APPENDIX D

DETAILED FINDINGS AND DESCRIPTION OF THE TECHNOLOGIES TRANSFERRED

In the course of this evaluation a series of extensive interviews with the Health Education Division (HED) Honduras staff were conducted by team member Antonio Cabezes. Some of the information gathered in these interviews has been included in the text of the report; much, however, was too detailed or relatively unrelated to the specific technology transfer process. It is briefly summarized below because of the depth of understanding it brings to the internal structure, functon and attitude of the HED and its overall relationship to the Ministry of Health and its foreign technical advisor. Translated from Spanish without significant modification for form and style, it is intended as a supplement to the report, not as an independent text.

1. PERSONNEL

Before Procomsi I, the Health Educational Unit had only two full time staff; three additional local employees were selected and added by AED following initiation of the project.

As of September, 1985, the HED has 18 full time employees, including two under provisional contracts and 8 coordinators of the Comitis Regionales de Salud, who are located in the headquarters of the country's sanitary regions.

In addition to the HED staff, the project has had expatriate advisors from 1980 to the present. In December 1984 the Health Education Division expressed its feelings that the role of the external technician was not needed any longer. Because of this, the Director of HED is giving special assignments to the foreign expert until the end of his contract.

The HED staff now feels that it is fully functioning and can now perform the duties assigned by the MOH. They also feel that the MOH commitment to the project has been demonstrated by hiring the project personnel as regular employees, despite current austerity in government programs.

2. FACILITIES

The amount of office space and equipment available to the HED has grown since 1980 and increased substantially after its incorporation with the Uidad Productora de materiales Educatavia (UPME) in 1984.

Offices: In September 1985, the HED has separate offices for: administration, secretaries, audiovisuals, a dark room for developing photographs, a radio control room, a radio studio room, 2 bathrooms, a warehouse and a meeting room. These facilities were provided by the Ministry and there is an approved project to build a new compound.

Graphic Equipment: In the new facilities, the HED has 3 drawing tables, 1 transparent drawing table for copies, all the necessary accessories and a photographic laboratory for pictures, slides, transparencies, etc.

Radio Equipment: In the first year, the HED could not produce any radiophonic material, although occasionally, some spots were produced in commercial radio stations. At present, a new studio is being installed with simple but good equipment, including a console, two tape recorders, a cassette, two record players and software.

The HED staff feels that in the future, this equipment will allow significant savings in the production of radio phonic material and that these savings can then be channeled for use.

Printing Equipment: To date, the project has used commercial printing establishments. In 1985, however, USAID/Tegucigalpa approved funds for professional printing

equipment within the MOH. This equipment will be available to the HED, but the staff is unclear about the degree of access it will have to it.

Transportation: Transportation is dependent upon the MOH motor pool and one vehicle purchased by AED for the PROMCOMSI I project. In the last 2 years transportation has been available through the motor pool when needed.

Budget: The Honduran national budget for fiscal year of 1985, allocated L900,000 for current costs plus salaries. The HED staff feels that serious efforts have been made by the MOH to provide the resources for a normal level of activity. Nevertheless, they feel that AID intervention (particularly continued financial support) is necessary to insure the possibility of better performance in the future.

3. METHODOLOGY

The HED description of the methodology it currently uses to execute campaigns is summarized below. It is based on, but differs from the methodology introduced under the MMHP PROCOMSI I project. The most significant features of this difference is a general erosion of the original methodology.

Research: The methodology used is horizontal, it starts looking at the real needs of the people. Research is carried out to determine the knowledge, attitudes and practices of the target population. Research instruments which the HED uses include: inquiries, focus groups, interviews, and observations.

Design: A deep analysis of the findings leads to designing an appropriate campaign, starting with a series of decisions regarding the media to use; in what proportion; the type and structure of the messages, systems of delivery, and contacts to make at different levels (e.g., Ministry health workers, local centers and volunteers).

Validation: The material produced is tested with other branches of the Ministry and the target population, as well as the HED itself. A final set of messages is approved for delivery.

Formative Evaluation: At the end of each campaign, usually every three months, different instruments are applied in order to determine the campaign's impact, its findings and lessons learned.

Specific execution of this methodology (with the exception of the Litisol/PROCOMSI I campaign, which was managed by AED and was executed in accordance with the original MMHP methodology) is as follows:

Research: The unit carried out base line research for four campaigns: Tuberculosis, Malaria, Immunizations (polio), and in 1984 Family Planning.

Design: In addition to the above campaigns, the unit is working at the moment in designing a nutritional campaign.

Validation: In 1985 they have validated:

-- One poster in nutrition
-- One poster on preventive medicine
-- Two flipcharts: One on rabies, the other in diarrhea

Evaluation: Tuberculosis, Malaria, Immunizations, Family Planning.

4. PROJECT OUTPUTS

Specific outputs of the HED in terms of these campaigns are shown in Table H-1. These figures include the Litrosol/diarrhea campaign, as the HED keeps no records which separate PROCOMSI I demonstration project materials from subsequent work.

Table D-1. HED Campaign Outputs

Radio:

	SPOTS	PROGRAMS	SONGS
1982	18,720	30	2
1983	42,510	29	-
1984	78,130	36	-
1985	137,020	20	-

Graphics:

-- Malaria (1983)

- Two Flyers: 200,000 and 100,000
- One pamphlet: 80,000

-- Diarrhea (1983)

- One fotonovel: 80,000
- One Calendar: 50,000
- One poster of breastfeeding: 20,000

-- Tuberculosis (1983)

- Paper cups 500,000
- 3 Poster (1983) (5x3) 15,000
  (repeat in 1985) 15,000
- Flipchart 1,000
- Pamphlet 80,000

-- Immunizations (1983)

- Three posters (30x3) 90,000
- One flyer 100,000

-- Family Planning (1984)

- Two Posters (5x2) 10,000

Table D-1. HED Campaign Outputs (cont.)

-- Nutrition (1985)	
- Two Calendars	100,000
-- Rabies (1985)	
- One poster	5,000
- One flyer	(on process)
- Newspapers	120,000 copies
-- Diarrhea (1985)	
- A new poster was designed	(in process)

Source: Information from interviews of HED staff.

In addition, the HED has given several seminars using the methodology described above. In 1983-1984, three seminars on radio program production were held in Comayaga, Choluteca and Juticalpa to support the regional expansion of the program. In 1985, one seminar was held on "Educational Communication for Health" with 35 participants from the eight regions to strengthen the regional health centers.

5. STAFF TRAINING

Seminars and individual training for the HED staff is shown below. Much of the in-service training was conducted or arranged by AED during PROCOMSI I; most training received by the

staff from courses outside of Honduras appear to have been supported under PROCOMSI II, although dates were not consistently available.

-- One 2 week seminar for 15 people, held in Tegucigalpa on January 1983, on base-line research (one week of theory and one week of practice in the field).

-- One 2 week seminar on validation of educational material, held in February 1983 for 15 persons in Tegucigalpa.

-- One seminar on production of graphic material, held in San Lorenzo (Health Region No. 4) for 20 people, May 1983.

-- One seminar on radio production sponsored and given by the population Communications Services Project, Hopkins University, held in August 1984.

In addition to these seminars, attended by all the members of the HED and associates, the following training was received abroad by various HED staff. Actual sources of support for this training were unavailable.

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Staff No. 1:

-- Producciôn de Programas Dramàticos. Radio nederland-Ciespal. Quito, Ecuador, September 1983.

-- Lactancia Materna. Panamà. _____

-- Orientation trip in El Salvador for immunization programs.

Staff No. 2:

-- Disenos de Material Educativo. Patrocinado por OPS. Brasil y Colombia, 1983.

-- Ticnicas de Mercadeo y Publicidad. Universidad Nacional Autônoma. Tegucigalpa, 1983.

Staff No. 3:

-- Ticnicas antropolôgicas de Investigaciôn. San Josi, Costa Rica, 1984.

-- Educaciôn en Nutriciôn: INCAP, Guatemala.

-- Formulaciôn de Objetivos Educativos. Special course at the Universidad Nacional Autônoma, Tegucigalpa, 1983.

-- Orientation trip in Mexico for family planning, 1984.

6. THE CAMPAIGN DISTRIBUTION SYSTEM

The HED is specifically concerned with three aspects of distribution in each campaign: How radio spots reach the broadcasting system, how graphic material goes to public places and to the target groups, and finally, how the product (litrosol, injections, etc.) reach health centers or private homes.

Radio. In PROCOMSI I, a survey was carried out to determine both the most popular radio stations and the peak audience hours. Afterwards, the budget was divided in the best possible way and radio stations were selected. A list was given to the MOH, which contracted the time.

Since the project was integrated into the Ministry of Health (MOH), the list presented by HED has not always been accepted and, for political reasons, changed to other choices. This has reduced somewhat,the effectiveness of radio campaigns.

Nevertheless, the HED has continued to apply project methodology regarding research and distribution believing that the information which is gathered can be used productively.

Graphics: In PROCOMSI I, members of the HED distributed all printing materials at all levels--a very difficult job. Now the MOH Department responsible for the campaign (e.g. tuberculosis) is carefully briefed and afterwards, distributes material and trains its own people. This frees the HED to work in the area of its expertise, i.e., the design of campaigns.

Product. Distribution follows the same pattern as radio and graphics by placing the responsibility for distribution with the branch or agency responsible for the campaign. The HED however, remains interested in the product in order to make the baseline research, select the messages and validate them.

7. INSTITUTIONALIZATION

The HED views institutionalization as the existence of a legal framework integrated into the structure of the MOH and feel that this framework was created in May, 1984 when the employees of PROCOMSI were hired by the government on a permanent basis, with status and salaries of regular civil

servants. The creation of the Regional Committee of Education for Health, which is charged with the methodology of the Central Unit furthers this brief. The provision of infrastructure to implement the methodology has apparently eliminated earlier staff questions about the future of the project, despite the fact that no budget has been allocated for much of its operation.